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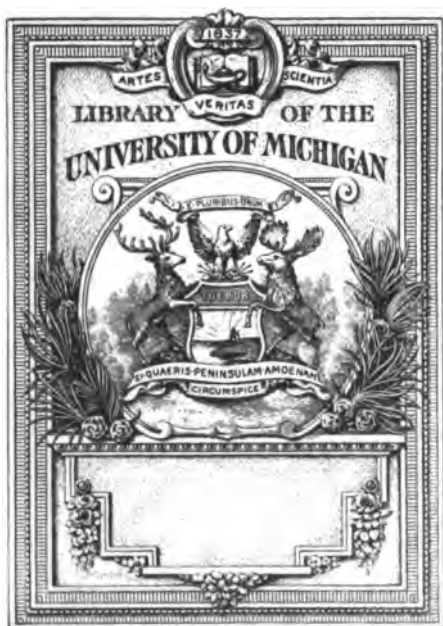


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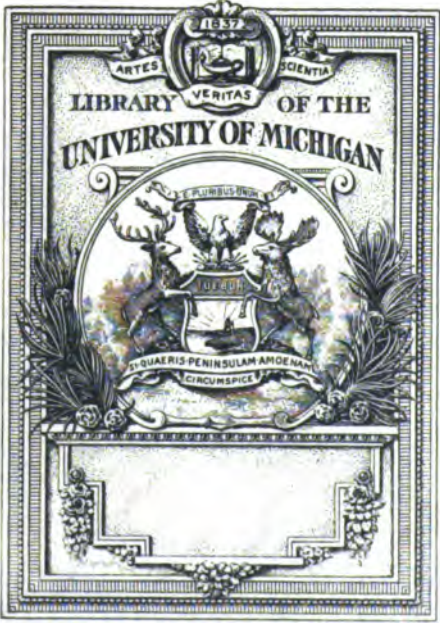
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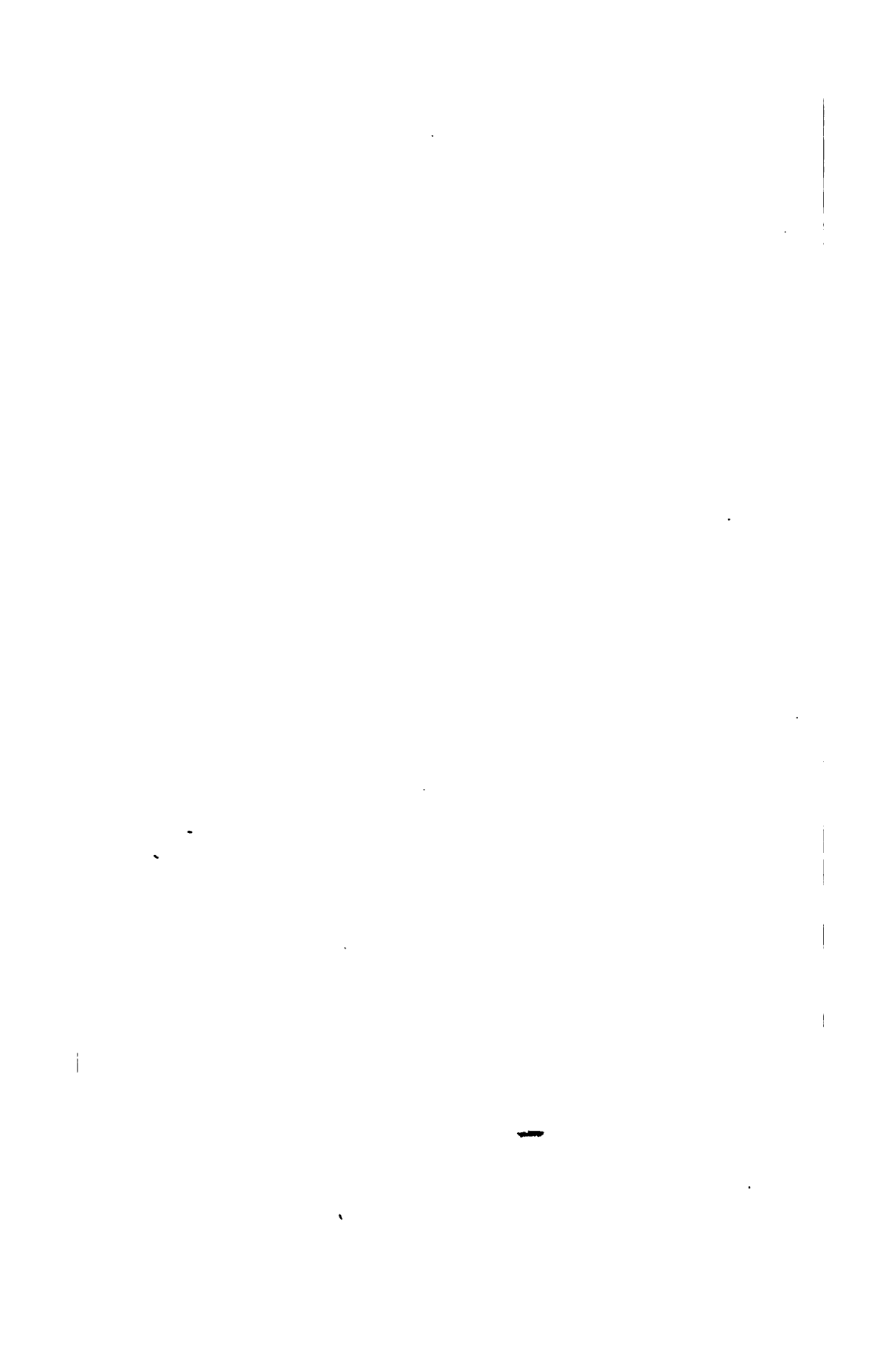
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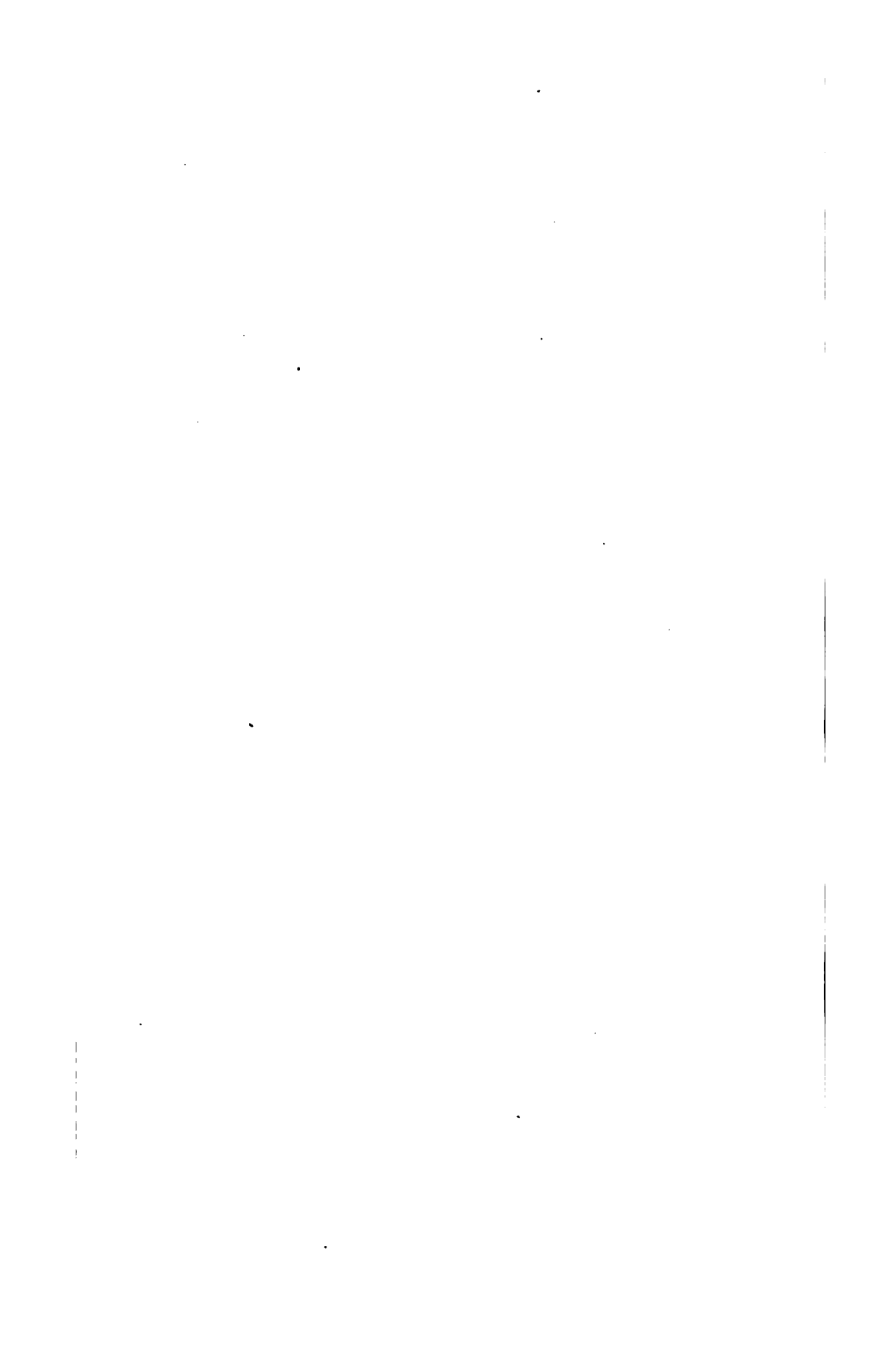
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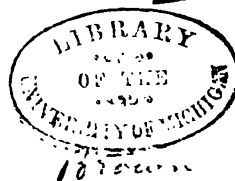
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No. 1

ABSORPTION OF TUBERCULAR MATTER.

By A. P. DUTCHER, M. D., Cleveland, O.

I.—THE POSSIBILITY OF ITS ABSORPTION.

Dr. Carswell and a few other writers, advocate the doctrine that tubercular matter may be absorbed without undergoing any change, that is, without softening, and its common sequence the formation of vomica. Vogel and other pathologists deny this in the most positive manner, and consider the tubercular process, from first to last, disorganizing and destructive in its nature and tendency. Perhaps in the present state of our knowledge, it cannot be positively determined, yet there are some reasons derived from analogy and practical experience which would lead to the conclusion that such absorption is possible.

There cannot be the least doubt that at first tubercular matter is always deposited in a semi-fluid state, and there is no evidence to show that it immediately becomes indurated or concrete; and if it should remain fluid for even a limited time, it would but obey the ordinary laws of the animal economy to re-enter the circulation by absorption. And it is a legitimate inference that such actions may be carried on for a considerable time, and thus retard or prevent the accumulation of the morbid matter, especially in those cases where the tubercular predisposition is not very great, or, if favorable influences are brought to act on the patient, there is every reason to believe that the tubercular exudation, like the inflammatory, may be absorbed, and the parts regain their usual health.

The evidence of the absorption of tubercle, as derived from

clinical observation, to our judgment, is quite conclusive, and admits of little doubt. It cannot have escaped the notice of those much engaged in the treatment of phthisical patients, that the incipient stages of the disease may be well marked by general symptoms and physical signs, yet the disorder, instead of advancing, will recede, and the patient regain his usual health. I have occasionally met with instances of this kind, where, from the presence of Thompson's gingival margin, prolonged expiratory murmur, dullness on percussion, with numerous withered cells and shrivelled nuclei in the expectoration, I have had every reason to suspect the existence of tubercular exudations in lungs. By prompt and efficient medical treatment the individual has been restored to health, and these signs have disappeared—the respiration in every particular becoming normal.

Admitting the proposition that tubercular blastema may be absorbed, it becomes a question of great practical importance, how this may be effected. Have we any therapeutical agents that will aid nature in this work? I believe we have. Many years experience in treating phthisical patients leads me to this conclusion. I will not enumerate just here the various remedies which we have found useful in filling these indications, but will cite a case from my medical book of medical fragments, that will present a better idea of my mode of diagnosis and treatment of this stage of pulmonary tuberculosis than any general description that I can give.

II.—HISTORY OF THE CASE.

June 26, 1858. Mr. T. M. came to my office this morning for advice. Says he has usually enjoyed good health until about six months since. He is a merchant by occupation, and attributes his loss of health to constant application to business, irregularity in sleeping and eating; has also been intemperate in the use of tobacco, and venereal indulgences; has been married twelve years, and wife has no children. He is of the nervo-sanguineous temperament, aged thirty-five. His brain is large; the region of the sentiments and propensities preponderating. The base of his brain is well developed, indicating an abundance of nerve power to drive the respiratory and circulating apparatus. Height, five feet and six inches; weight, one hundred and fifteen pounds; weight in health, one hundred and thirty-five pounds.

Has a hereditary tittle to phthisis; his mother having died with the disease. And is in good circumstances to enjoy life, if he only had health.

PRESENT CONDITION.—Pulse ninety-six in the sitting posture, and respiration thirty. Tongue red and dry. Thompson's gingival margin clearly defined upon the gums of the lower jaw. His appetite is bad, stomach irritable with occasional vomiting. Bowels constipated; urine scanty and high colored, and under the microscope exhibits numerous epithelial cells from the bladder, and large numbers of the crystals of the oxalate of lime. For the last month he has been troubled with cough and expectoration; a microscopical examination of which shows the ordinary constituents of mucous expectoration, with a small number of withered cells and shrivelled nuclei. He has constant pain in the left breast, just under the clavicle. On pressure, there is tenderness over the epigastric region; there is also tenderness and fullness in the region of the liver, pointing out considerable engorgement of that organ. Is troubled at times with vertigo and palpitation of the heart; hands and feet almost always cold; Has to wear an extra amount of clothing to maintain his animal heat. Has never had chills or fever. His muscles are soft and flabby; skin blanched, and countenance expressive of debility and anxiety.

On inspection, the chest was found to be large and symmetrical; no inequality in its motion could be detected. On percussion the resonance of the chest was clear, excepting over the superior lobe of the left lung; here marked dullness was elicited from the summit to the third intercostal space, corresponding with the location of the pain complained of by the patient. On auscultation, the respiratory murmur of the right lung seemed to be somewhat louder than natural, with slight mucous rhonchi; on the left side, prolonged expiratory murmur was pronounced; it was heard over the region bounded by the whole superior lobe. The heart sounds were normal, but its impulse was more forcible than usual.

DIAGNOSIS.—This is quite obvious. Recent tubercular exudation in the superior lobe of the left lung, congestion of the mucous membrane of the stomach, and engorgement of the liver.

PROGNOSIS.—This is far from flattering. Patient has no idea

of the gravity of his case. Although an intelligent and prosperous business man, yet, as is frequently the case, exceedingly ignorant of the laws of health. Also very self-willed, thinks he ought to be cured in a few days, and is unwilling to leave his business, reform his habits, and employ such hygienic measures as will improve his general health.

TREATMENT.—This I declined for the want of assurance that the patient would be obedient to prescription. He left and I saw no more of him until the 26th of July. His symptoms had changed but little since his first visit. He had made up his mind to submit to the treatment proposed.

The indications for treatment seemed to be three :

- (1.) To improve his hygienic condition.
- (2.) To relieve the engorgement of the liver, and improve his digestion ; and
- (3.) Produce absorption of the tubercular exudation in the lung.

In the first instance, he is to abandon all his irregular habits, put away his tobacco, relinquish his confining employment ; take such out-door exercise as his strength will allow, use the tepid bath every third day just before tea, retire to rest at nine o'clock, P. M., and rise at six o'clock, A. M. ; his mind is to be occupied with cheerful conversation and pleasant reading ; his animal heat is to be maintained by such clothing as the temperature may indicate. To improve the condition of the digestive organs, he is to take twenty grains of the chlorate of potash three times a day. His diet is to consist chiefly of bread, butter, boiled rice, and animal jelly. To relieve congestion of the liver and costiveness, he is to take one of the following pills at night on retiring to rest :

R Mass. Pill. Hyd., grs. xii.
 Podophyllin, grs. vi.
 Ext. Hyoscyami, gr. xxiv. M.

Ft. in pill, No. xii.

As a counter irritant to the affected lung, a small blister is to be applied just under the clavicle, and is to be renewed as often as it heals.

August 10. Patient returned this morning ; treatment appears beneficial ; the tongue looks better, and the digestion is improving ; bowels regular, rests well at night ; has a desire for

greater latitude in his diet, but this is not allowed. Omitted the pills, and continued the chlorate of potash.

September 1. The stomach has regained its healthy functions; liver entirely relieved; patient's strength is very much improved; can walk a couple of miles in the course of the day; has tried riding on horseback, but finds that it increases the pain in the chest. The patient was now allowed a slight increase in the range of his diet, and a tablespoonful of cod liver oil, and a dessert spoonful of the following three times a day, one hour after eating:

R Syrup Phellandrii Aquatici, comp. ℥viii.
Potassi Iodidi, ℥ii. M.

This is a favorite prescription of mine in all cases of tubercular exudation, particularly in the first stage. The following is the formula which I use for making the syrup phellandrii aquatici compound:

R Lem. Phellandrii Aquatici,
Rad. Stillingiæ Silvaticæ,
Cont. Cinchonæ Rub., aa. ℥ii.
Sacc. Albæ, ℔ii.
Aqua Bullientis, Oii.

The seeds, bark and roots, are to be well bruised, placing them in a proper vessel; add the boiling water and simmer over a slow fire for twenty minutes; when cold, strain; then evaporate the liquid to one pint; add the sugar; dissolve with a gentle heat, removing any scum which may form; strain the mixture while hot.

To secure a more permanent counter-irritant, the com. cantharides was omitted, and the comp. tar plaster of the Eclectic Dispensatory was substituted. This, by the way, is a most powerful revulsant, and when we wish to keep up counter irritation for a considerable time, it is far superior to cantharides, tartar emetic, or croton oil.

October 1. Patient has been gradually gaining weight and strength. He now rides five or six miles a day on horseback; eats with a relish the most substantial food; he has still some cough and expectoration, but no pain in the chest; his pulse is 75 in the sitting posture, and respiration 21; percussion still elicits slight dullness under the clavicle. On auscultation, the inspiratory and expiratory murmurs are nearly equal, showing a

my patient had a hereditary proclivity to phthisis, his health would not have suffered if he had been regular in his habits, and attended with proper care to the wants of his physical system. Even when he first became ill, he possibly would have regained his health without medication, if he had relinquished for a season his business, abandoned his vices, and pursued a course of life more in accordance with the laws of man's physical being. Nothing but the most careful hygienic regulations can save individuals suffering with pulmonary tuberculosis, and these must be insisted on from the very first. In some diseases a person may continue to engage in an unhealthy occupation, chew or smoke tobacco, drink ardent spirits, and indulge in other vices, and yet, after a time, regain comparative health; but not so in phthisis: here there must be total abstinence from every injurious habit. Physicians have sometimes been astonished at the recovery of tubercular patients, when they have abandoned all drugs, relinquished their indoor confinement, and gone out, as it were, to seek health in the roughest kind of life. But if they would examine this mode of life, they would, perhaps, not find half so many violations of the laws of health as in the former.

In phthisis we sometimes can accomplish much with medicine, when it is well sustained by proper hygienic measures. Our patient, T. M., like many others, was willing to take any bitter drug that we might prescribe. He desired to be cured, but at first was unwilling to renounce those things which lay at the foundation of all his troubles, and were the chief obstacles in the way of his recovery: his sedentary pursuits, his attachment to tobacco, and his abuse of the sexual propensities. To abandon vicious habits is no easy task. The disorder of man's moral nature is such that he finds gratification in vicious indulgences. This proclivity in man's mental constitution is frequently a great obstacle in the way of our benefitting the afflicted of the race. They are not always willing to relinquish their vicious habits. We prescribe for their physical maladies, but all in vain. They eke out a wretched existence in this world, die in their sins, and go to perdition in the next.

CLINICAL EXPERIENCES IN PRIVATE PRACTICE.

The Nature, Purpose, Pathology and Remedial Management of Typhoid Fever clinically illustrated.

The Report of the Committee on New Remedies to the Muskingum County Ohio Medical Society, December Meeting, 1870. The Acid Solution of the Sulphate of Magnesia.

By Z. C. McELROY, M. D., Zanesville, O.

In my report this month I have had a double purpose in view: 1st. To invite attention to an old combination of sulphate of magnesia and free sulphuric acid, which, as it has not received any name, so far as I can ascertain, I propose to call "acid solution of the sulphate of magnesia." It was first proposed by Dr. Henry, of Dublin, though the formula he used has been found less agreeable than one of my own, containing only one half the quantity of free acid; * 2d. To illustrate its uses clinically, I have perhaps, in obedience to the force of circumstances, rather than my own choice in the matter, been able to accomplish a third purpose, and that is to illustrate, not only one of its most important uses, but the general remedial management of a case of so-called typhoid fever; regarding the febrile phenomena as statutory processes, whose nature, purpose and end is the preservation of life by the removal of tissue, incapable of evolving the normal phenomena of life by its decay, oxidation, or combustion; and the reconstruction of the tissues in normal molecular forms, with normal dynamic capabilities.†

* Saturate boiling water with sulphate of magnesia. To one pint add one ounce arom. sulphuric acid. Dose: tablespoonful to wine glassful in tumbler of water.

† Since the completion of the MSS. of this report, a letter from a physician, of a third of a century experience, to a female relative, was handed to me for reading. I know the writer, and his amiable and interesting family, and was therefore deeply interested in his sad and touchingly eloquent history of their afflictions the past fall. Some extracts are here introduced, to bring into juxtaposition the mental conceptions which governed me in the professional management of this case, and those which he entertains in regard to so-called typhoid fever, as he saw it and studied it in his own family so recently; and, according to my observation, his conceptions correspond very accurately with those nearly universally held by the profession at the present time. The letter is dated near the close of November, and for obvious reasons, names and place are omitted. And the extracts are not made in any unfriendly spirit, but solely for illustration, and because they are vivid and eloquent. Few who read them will fail to sympathize with, if not drop a silent tear, for the sorrows and bereavement of the now somewhat aged physician.

" * * * About the middle of July last ——— was attacked with typhoid fever, and for six long weeks it clung to him with a fiendish tenacity, manifesting most of the time a terrible malignancy. At the end of the sixth week he began to improve, and in a month was able to

I have taken notes recently of quite a number of what seemed at the commencement grave cases of so-called typhoid fever, with the view of reporting a case; but they all recovered so promptly that the diagnosis might have been a subject for difference of opinion. The case I am about to report to you came under my professional care very unexpectedly at the end of the fifteenth day. My own choice in the matter would have been to decline any professional connection with it, but placed as I was—the patient having complied with the “code”—I had no alternative, and so assumed its professional management.

I. O., aged twenty-four, married, one child. Health good previous to present illness.

15th day. 28th October, 1870. 10 o'clock, P. M. Temperature 104, respirations 24; pulse 110—very soft, weak, and easily obliterated. Patient smells bad; has a fetid breath; urine smells very offensive, and discharges from bowels very fetid. Says he has had no food but rice since the commencement of his sickness; has had five or six different diseases in the fifteen days of his illness, and now demands to know what is really the matter with him. I said to him, in reply, that a name for his sickness was of much less moment to him than his recovery from it; and that I should pay very little attention to his disease, but would give him every possible care, as I considered his object in calling me to his assistance was more to get well than to obtain a name for his malady. In other words, I considered him greater than his disease, and he would be, therefore, the object of my professional care.

He is to have a warm bath to-night, and to be well washed with soap while in it; and to take wineglassful solution of

attend to his business, and is now in excellent health. * * * While ——— was still confined to his room, the pestilence seized upon ———, my wife, and ———, my daughter. My daughter was attacked at church, while about to partake of the sacrament. The disease overwhelmed her at once, congesting her lungs and spinal marrow, and causing her death by apoplexy in six days. My wife and son were so very ill at the time, as to deprive me of the sad privilege of following my daughter's remains to the grave. They were stricken down almost at the same moment, the disease exhibiting, from its onset, the most malignant nature. For more than two months I despaired of their recovery; but after a fearful struggle on the part of nature aided by the unremitting attention of a host of friends, the demon took its departure, and they simultaneously commenced their march from the verge of the grave towards life and health again, and are now able to be about their rooms. * * * It will be hardly possible for you to appreciate the mental excitement I endured during the whole time this terrible malady raged and rioted in my family or how my physical powers were taxed in glare of day and gloom of night by my efforts to save them from threatened destruction by this unmitigated plague, that makes no discriminations, but assails all alike.”

chlorate potassa (tablespoonful to a quart of water) every three hours.

16th day. 29th October, 1870. 8 o'clock, A. M. Has rested well last night. Temperature 102, respirations 24, pulse 102, very soft and feeble.

To have bread and milk to eat, and milk to drink often to-day; no regular meals. Is to eat and drink, because it is necessary for him to do so; and is to do so just as he would do disagreeable work, if well, simply because it was a duty. To this he replied, that he did not want food, it did not taste good; and he could not see the propriety of eating when it went against him. Pointing to his child, I told him it would require, if fed from a bottle, two quarts of milk each twenty-four hours, to supply its wants, and that it only weighed twenty, or twenty-five pounds; and while he weighed over a hundred and twenty-five pounds; and besides, was wasting rapidly, in fact, expending more force than any man at hard labor in the city; and that he ought, without complaint, to take a baby's diet, especially as his ultimate recovery at all depended on his taking food, to make good some of his waste. He promised me he would take as much milk as the baby.

To have tablespoonful acid solution of sulphate of magnesia, in half a tumbler of water, at once; and continue the solution chlorate of potassa, as prescribed last night. 4½ o'clock, P. M.—Has had three motions from bowels, passes water, and both still smell very offensive. Has taken about a pint and a half of milk since morning. Is to have a warm bath again to-night; continue solution of chlorate potassa; and try and keep up with the baby with milk and food.

17th day. 30th October, 8 A. M. Has rested badly; bowels moved five times in all—about two pints of fluid matter, which has ceased to smell bad. Passes water, and it no longer smells offensively. Drank some milk early this morning, and has thrown it up. Feels discouraged; thinks he is a great deal worse. Temperature 104, respirations 24, pulse 96; pupils slightly dilated; skin moist and warm.

Is to have a portion of boiled pheasant to-day, as well as bread and milk. To take two pills, two grains each, citrate quinia and iron every four hours, and continue solution chlorate potassa.

4 o'clock, P. M. Has had two discharges from bowels to-day,

quite watery, but do not smell bad. Passes water. Has eaten half a pint of soup from the game, and drank nearly a quart of milk. Temperature 104, respirations 30, pulse 96, full, soft and weak.

To have warm sponge bath to-night; three sugar-coated pills, Dover's powder (10 gr.) near bed time, and quinia and iron pills during the night, and all the food he can be induced to take. Discontinue solution of chlorate potassa.

18th day. 31st October 8½ o'clock, A. M. Has rested well, and feels much better this morning. Has had a quart of milk, and thinks he has beat the baby; no passage from bowels; passes water, which is high colored; nothing smells bad now. Temperature 101, respirations 24, pulse 90, fuller and somewhat stronger; tongue nearly natural in color, and not much coated, in striking contrast to its fiery red during the last three days. Pupils nearly natural. To continue quinia and iron pills, and to take more food to-day.

5 o'clock, P. M. No motion from bowels; passed water; drank about a quart of milk and soup to-day. Temperature 105, respirations 24, pulse 96. Tongue dry, not much coated, but red again; pupils nearly natural. To have tablespoonful acid solution of the sulphate of magnesia, in a tumbler full of water, and repeat every three hours till bowels move. After the bowels move, to have Dover's powder pills, (10 gr.) and continue the quinia and iron pills, and to take more food.

19th day. 1st November, 1870. 8 o'clock, A. M. Had to take three doses of the solution of magnesia last night before the bowels moved, and has had four or five motions. Has slept some since; is somewhat more sallow this morning than heretofore; and loses flesh rapidly. Has had two quarts of milk in the last twenty-four hours. Temperature 100, respirations 24, pulse 84. Pupils natural; skin moist; tongue moist, and covered with brown fur. Has had a-milk breakfast, and has not thrown up any. Is to take two Dover's powder pills (6½ grains) at once; continue iron and quinia pills, and take more food.

4 o'clock, P. M. Has had two motions from bowels to-day. Passes water, and has thrown up some milk to-day; face deeply flushed; does not like any food. Wants buttermilk whey. Has had some raw beef finely cut up, but dont think anything is good but buttermilk whey. Intellect clear, as it has been most of the

time, and is considered better. To have sponge bath, Dover's powder pills (10 grains,) quinia and iron pills, and more food to-night.

20th day. 2nd November, 8 o'clock, A. M. Has had a good night; drank a quart each of butter and sweet milk during the night; slept well; had one motion from bowels, and passes water. Color improving; tongue moist and covered with brown fur; skin dry, but not very hot. Had some beef-steak, bread and butter, and milk for breakfast. Temperature 102, respirations 26, pulse 90. Pupils natural. To have his bed changed; continue quinia and iron pills; and to take more food.

Learning after I had left him that his bowels had not moved, as he had informed me, his brother was sent back to give him three tablespoonsful acid solution of the sulphate of magnesia at one dose, which he got at 10 o'clock, and the bowels responded at 1 P. M. 4 o'clock P. M.: has had four small motions from bowels as the result of the acid magnesia taken in the forenoon, which were again very offensive; breath sweet; tongue red, covered with moist brown fur; passes water, which does not smell strong. Has taken a quart of milk, and slept some. Temperature 102 60-100ths, respirations 24, pulse 96, pupils dilated. To have Dover's powder pills as usual; quinia and iron pills, and food to-night as heretofore.

21st day. 3rd November. 8½ o'clock, A. M. Slept almost all night; is bathed in profuse perspiration this morning. Bowels moved twice; has passed water during the night; and has had a motion from bowels this morning. Has thrown up some milk drank early this morning. Has had some toast and milk since, which rests easy in his stomach. Is not sick now, and does not feel any uneasiness. Has a good color, tongue moist and clearing up. Temperature 98½, respirations 24, pulse 84. Pupils natural.

Is to have his clothes and bedding changed when the sweat goes off. To continue quinia and iron pills, and take all the food he can to-day.

5 o'clock, P. M. Perspiration passed off at 11 o'clock, when he had sponge bath, dry clothing, and bedding changed. Has been very quiet all day, and taken more food than any day since his sickness, and begins to like some articles. Bowels have moved once, and has passed water. He thinks he is not as well as he

was in the morning. Temperature 104 60-100ths, respirations 24, pulse 96. Pupils large; tongue moist and clearing. Is to have sponge bath, Dover's powder pills, iron and quinia pills, and all the food he can be induced to take to-night.

22nd day. 4th November, 8 o'clock, A. M. Has rested well, and eaten more than during any previous night. Is not sweating this morning. Is, and has been, dull of hearing during my connection with his case; face more or less deeply flushed nearly all the time. Temperature 102, respirations 21, pulse 96. Pupils nearly natural; tongue moist and clearing; no motion from bowels; passes water. Is to have three table-spoonsful acid solution of the sulphate of magnesia at 10 o'clock this morning, in sufficient water not to affect the teeth. Quinia and iron pills, and food as usual.

4½ o'clock, P. M. Bowels have moved twice; passes water; thinks he has eaten quite hearty to-day; has had two quails, and bread and milk in addition, and thinks he has got clear out of the baby's reach. Temperature 103, respirations 24, pulse 96. Pupils widely dilated; tongue red, but moist, and is not cleaning any since yesterday. Nothing smells bad about him. Is to have sponge bath, Dover's powder pills, iron and quinia pills, and food to-night, as usual.

23rd day. 5th November, 8½ o'clock, A. M. Has not rested so well last night as usual; sweat a good deal; had several small motions from bowels. Has drank some milk, eaten bread and butter, and some game. Weather very bad, cold rain all last night, and very dark and gloomy this morning. Temperature 100 10-100, respirations 24, pulse 96, full soft and regular. Pupils widely dilated, tongue very red, but not much fur; color of the skin improving very much. To have food, and quinia and iron pills, as usual, to-day.

4½ o'clock, P. M. Has been very quiet and comfortable all day, and thinks he has eaten a great deal. No motion from bowels, but passes water freely. Temperature 103, respirations 24, pulse 105; pupils still widely dilated. Tongue red, moist, not much fur; face deeply flushed. To have Dover's powder pills. Iron and quinia pills, and food, as usual, to-night.

24th day. 6th November, 1870. 8½ o'clock, A. M. Had only two naps last night, but they occupied the whole of it. Had an operation from bowels at bed-time, and has passed water.

Thinks the baby may have beat him on the milk last night, but he is sure he is ahead in sleeping. Temperature 102, respirations 20, pulse 90. Pupils natural. Color of face natural, and good; rests easy. Is to have food, and iron and quinia pills to-day.

5 o'clock, P. M. Has had a good day; eaten very considerable; had one dejection from bowels; skin dry, warm, and good color. He thinks he is getting better. Temperature 104, respirations 24, pulse 96; pupils too large; tongue red, with thin coat of white fur overlying the whole of it. To have Dover's powder pills at bed time. Three tablespoonful acid solution of sulphate of magnesia any time after midnight, in sufficient water. Iron and quinia pills, and food as heretofore.

25th day. 7th November, 1870. 8½ o'clock, A. M. Restless last night; no motion from bowels yet. Had a good supper and breakfast, and says now they taste good; and he gets hungry, and thinks it strange he has not been so before. Temperature 99½, respirations 24, pulse 90. Pupils natural; tongue red and dry this morning; skin moist.

To have acid solution of sulphate magnesia this morning; iron and quinia pills and food, as heretofore, to-day.

4 o'clock, P. M. Has had a good day. One small dejection from bowels; passes water. Looks much better. Has had some soup, and bread and milk to-day; and says he has made arrangements for some oysters for his supper. To have Dover's powder pills at bed time (10 gr.); continue iron and quinia pills, and take food as usual. To continue the acid solution of sulphate of magnesia, of which he has now taken four tablespoonsful since last night, until his bowels are open sufficiently. He says he thinks he is better after each dose of it, and would continue it all the time, if permitted.

26th day. 8th November, 8½ A. M. Rested well last night. Had three dejections from bowels early in the evening, and one again this morning. Has had an oyster breakfast, with crackers and milk thrown in. Everything tastes good now. Temperature 99 80-100ths, respirations 20, pulse 90. Pupils somewhat larger than natural; tongue red, with thin covering of whitish fur. His skin is much better in color. To have food and iron and quinia pills to-day.

4½ o'clock, P. M. Is sitting up in easy chair this evening. Has

had a good day. Has eaten oysters, bread and milk, baked apple, and buttermilk to-day. Temperature 104, respirations 26, pulse 96. Pupils dilated. Has had three motions from bowels, and passes water freely. To have sponge bath and Dover's powder pills at bed time. Food, and quinia and iron pills, as heretofore, to-night.

28th day. 10th November. 8½ o'clock, A. M. Has slept well last night. Color of skin good. Nothing from bowels. Passes water. Temperature 100 50-100ths, respirations 24, pulse 90. Pupils a little, and but little, too large. To have food, and iron and quinia pills to-day.

4 o'clock, P. M. Has had a good day. Has eaten a hearty dinner, and everything tasted well. Temperature 103, respirations 21, pulse 90. Pupils widely dilated; skin dry, and naturally warm and soft. To have sponge bath, and Dover's powder pills at bed-time; and food, but no pills of iron and quinia during the night.

29th day. 11th November, 9 o'clock, A. M. Did not sleep good last night. Thinks he slept too much yesterday afternoon. Had no pain, but simply could not sleep. Has, however, enjoyed his breakfast, and feels well this morning. Bowels moved once, and has passed a much larger quantity of water from bladder than usual. Temperature 99½, respirations 18, pulse 90. Pupils widely dilated. Skin moist and has a good color. To have food and quinia and iron pills to-day.

4 o'clock, P. M. Has had a good day. Nothing from bowels. Thinks he is getting well fast. Temperature 100½, respirations 18, pulse 84. Pupils much smaller. To have sponge bath, and Dover's powder pills at bed time. Food, if he is awake in the night, but no other medicine.

30th day. 12th November, 8½ A. M. Slept soundly all night, and has had a good hearty breakfast, and feels better in every respect. The unmistakable glow of health returning to his skin and face. Temperature 98½, respirations 18, pulse 90. Pupils natural. Discontinued all medicine, except Dover's powder pills at night, and dismissed myself from further regular attendance on the patient. To have at bed time two Dover's powder pills (6½ gr.), and in decreasing doses nightly, so that at the end of three days all medicine will be discontinued. To ride out on all pleasant days; walk out; eat almost anything he desires;

and is only to keep his bowels regular by the acid solution of sulphate of magnesia if necessary.

So far as the professional management of this case is concerned, and I hope the society will pardon the monotony of its daily details, it can hardly be remarkable for anything except its simplicity and straightforwardness. Underlying its purpose was the pathological conception, that the phenomena of the febrile state were salutary processes, designed to oxidise, or burn up tissue, which had lost its normal dynamic capacities, to the end, that the life of the patient might be saved. My professional duties were, to my mind, clearly limited to guiding the processes, ministerial, to this end. Any effort to cut short these processes, by any therapeutical *corps d'état*, were regarded as clearly foreign to the purpose of the phenomena, and was, therefore, not attempted. My study of the phenomena of the case, semi-daily, was not confined to the superficial symptoms. Behind them were occurring certain chemical changes, to which indeed they were due, and on which they depended, and it was to these that by far the largest part of my attention was directed. I placed before my mind the food, animal and vegetable, out of which it was, alone possible for my patient, or myself, to construct our bodies; and it was clear to me that important changes in its molecular structure must occur before it could become part and parcel of either of us. And in my mind, I endeavored to follow these chemical changes intervening between food and living flesh. In obtaining these conceptions, I was greatly aided by chemical achievements out of the body. The ultimate elements of the food eaten by human beings are well known; as well as their relative proportions in the different tissues, or structures; composing them. So, the elements of the refuse of coal distillation, for the production of illuminating gas, are well known. But the chemist cannot, or does not now take them, and combine them, so as to obtain the wonderful carbolic acid, or still more wonderful aniline dyes. On the contrary, he must start with the complex combinations found in the gas retorts. He supplies, by heat, acids, alkalies, and other chemical combinations, the conditions for almost endless chemical mutations and educts. In explanation, the organic chemists, guided by known laws of chemical affinity, or combinations between the elements present in his

apparatus, constructs formula, showing what he knows, or concludes, must occur, between the beginning and the end of his processes. He finds that the presence or absence of certain combinations of organic, or inorganic matter, materially alters his educts, as well as modifying the decompositions and recompositions necessary to his ends. Success or failures in any of his proceedings or processes, he does not attribute to luck, or chance, but to the presence or absence of some essential condition.

In the study of the phenomena of disease, so-called, in the human body, I endeavor to follow his example and profit by his experience. Food, I know, must, by certain chemical processes, be converted into certain fluid and solid states, as essential conditions for the evolution of any of the phenomena of life. And for the evolution of life phenomena, I know equally well, these solids and fluids must undergo chemical decomposition, for all work, or force, implies waste; in organic life, waste of tissues. And it is equally certain that few of the materials of tissue once started downward towards simpler chemical states, can be worked over again in the living body; hence become effete matter, and of course, modes of force of greater or less power.

By such means and processes as these I get definite conceptions concerning the chemical changes taking place in the complex fluids and solids of the body, in the pathological states called fever. In the processes of retrocession of the fluids and solids to simpler chemical states in fevers, heat is the mode of force, more conspicuously developed, coming within the comprehension of our senses. Why? For no other possible reason than that the tissues have lost dynamic capacities, and most likely in the molecular forms of structure. From these, and from a multitude of other facts, physiological and pathological, function is demonstrated to be the language or expression of structure: And every modification of function has behind it either a modification of molecular motion, or chemical changes, or modifications of molecular forms of structure, or both. And that it seems probable is the simple pathology of all so-called fevers, from the mildest form of catarrhal, so-called, including the eruptive, up to the gravest forms of vomito, cold plague, or Asiatic cholera; for the difference in the exterior phenomena

or symptoms is clearly traceable to difference in the modes of the same forces, and the velocity of molecular changes.

In this way I speedily formed definite conceptions of what was taking place in this young man's body, and as definite conceptions of what was my duty as a physician, summoned to his assistance in his recognized perilous condition.

The increased molecular activity, as evidenced by the elevation of his temperature above the natural standard, would necessarily result in an increase of the results of tissue metamorphosis, or decay; and one of my main points of interference must, therefore, be in perfecting its elimination.

It seems to me that some, at least, of the pathology coming on, or developed during the later stages of all grave fevers, as diarrhea, hemorrhage, ulcerations of the bowels, delirium, and other so-called local complications, and sometimes death, are due to the retention of the products of tissue decay. For it seems almost certain that these are the most potential elements of mischief in all so-called fevers, accompanied by high ranges of temperature. The effects of the retention of excrementitious matter is strikingly illustrated in so-called uræmia, septæmia, etc., etc., explanations of whose *modus operandi* are hidden in the meaningless formula of "blood poisoning;" while the facts are, that the presence of these excrementitious matters arrests repair *in toto*, and deranges still further the dynamic capacities of existing tissue. And this, no matter whether the retention is due to mechanical causes, or deficient dynamic power for their expulsion.

In the professional management of this case it will be noticed that the remedial agents were few in number, and continued, without change, to the termination of the case in recovery. The chlorate of potassa was given with the definite conception that it was a so-called disinfectant, that is, that its effects would be to render the effete matter in the body less offensive to the sense of smell, and lessen its capacity for mischief while retained; and I think this result was realized. The acid solution of the sulphate of magnesia was prescribed with the definite conception that it fulfilled the double purpose of promoting repair by its free acid, probably, and the elimination of the results of tissue decay, incidentally limiting its power of mischief, until expelled from the body. There can be no doubt that this result, too, was

realized. The citrate of iron and quinia was prescribed with the definite conception that it was a combination actively promoting the formation of solid tissue, with normal dynamic capacities.

And the Dover's powder, with the conception that it would hold motion in check, so as to imitate, as far as possible, natural sleep, during which, it seems probable, repair proceeds most actively. And the food, with the conception that it was the material for the reconstruction of the wasting tissues. And it is worthy of remark that nothing was given whose ultimate elements, and in most instances proximate chemical compositions, were not natural constituents of a human body in a physiological condition. For chemists believe they have discovered quinia as a natural constituent of the blood, and, perhaps, solids.

Taking the admitted uncertainties of much of our medication into a critical study of the therapeutical management of the young man's case, I can not claim that what I did for him was the very best that could have been done. Others may have been able to do better, but they would hardly have done it more intelligently. But my claim to simplicity and straightforwardness and certainty, has an undoubtedly good foundation. No golden moments were lost in trying the effects of this or that remedy, which had apparently been beneficial in the professional management of apparently similar cases in the hands of others. The design or expectations of each therapeutic measure were realized in each instance, and with nearly as much certainty as those of mechanical engineers in our own times. And the recovery of the patient was as prompt and complete, and in as brief a time, as all experience proves to be possible.

The case is not submitted as a model to be literally followed in the therapeutic management of all cases of so-called typhoid fever. The mental conceptions connected with and determining the particular therapeutics of any given case would necessarily vary with added or diminished phenomena. I found the case comparatively simple, and one of my aims was to keep it so; and this, too, was realized.

The so-called complications, as hemorrhages, etc. when not present at the commencement, do not often appear afterwards without warnings, either from the thermometer or otherwise, which, if unheeded until the events make their own announcements, are too frequently beyond remedial control.

Regarding the phenomena of so-called typhoid fever as salutary processes, intended for the removal, by oxidation or combustion, of tissue, which has lost its normal dynamic capabilities—and that is the best and only explanation which science offers—professional interference ought to be strictly limited to guiding the processes ministerial to this end. And the two most important things to be looked after is the proper elimination of effete matter, and the supply of organic material for the reconstruction of the wasting tissues. Other purposes came into play, as they did in this young man's case, such as disinfecting the results of tissue decay, procuring quiet sleep, cleanliness, etc. etc. which it was my duty as a physician to look after as they were; but they are secondary to the two main things of elimination, and the materials for reconstruction.

Steadily keeping these points prominently in view, it is difficult for me to see that any case, however complicated, should present problems incapable of solution in its therapeutical management. There ought not now-a-days to be any trying the effect of this or that remedy, and sooner or later there will be none.

It may be proper to state that the patient in the present case was surrounded by every condition and circumstance needful for his recovery. Loving eyes watched him, night by night, until the twelfth day of my service, when they were discontinued as being no longer necessary. Willing and able hands, day and night, did for him all they were requested.

In the acid solution of the sulphate of magnesia there is a combination of therapeutic agencies of the utmost importance, having a wide range of application, which it is not difficult to identify in our daily intercourse with the sick, if our scrutiny extends behind the visible phenomena; and it is realized that the patient is greater than his malady. While the preparation lacks pharmaceutical elegance in taste, it is better than the naked watery solution of the sulphate of magnesia, and but few are found, except children, to refuse it, when its importance is made known to them.

TOBACCO IN THE TREATMENT OF HYSTERIC CONVULSIONS AND CATALEPSY.

By A. J. MILES, M. D. Read before the Academy of Medicine,
December 19, 1870.

The treatment of hysteric convulsions and catalepsy is so troublesome and perplexing to the physician, and the source of so much anxiety to the friends of the sufferers, that I have given considerable thought as to the means by which they might be more speedily controlled.

No observable lesion having been revealed by post-mortem examinations, of hysteric cases, the fact is established that the disorder is purely functional in character.

The causes of hysteria, in the majority of cases, are uterine derangements; sometimes, however, it proceeds from anemia, and the emotional faculties, besides, whatever induces the excitability of the nervous system may provoke attacks. In all the cases there is local irritation of some part, followed by secondary, or reflex action, with contraction of muscular fiber, resulting in a variety of phenomena so resembling other and more dangerous forms of disease, that diagnosis is sometimes rendered difficult. The simulation may assume the character of epilepsy, chorea, hydrophobia, coma, mania, strychnia poisoning, and besides have every perversion of the functions of voluntary motion, and muscular rigidity.

Remembering then that whatever may be the cause of hysteric convulsions and catalepsy, we have, as the result, irritation of the motor nerves and contraction of the voluntary muscles from reflex action.

In the treatment of these cases the reflex symptoms are first to be controlled before the cause can be reached, and for this purpose I have used tobacco with success, as the following cases show.

CASE I.—January 30, 1869. At noon I was sent for in great haste to see Mrs. D. aged 20, married, German; previous health good; her first symptoms commenced during the morning with pain and distress at the epigastrium, oppression of breathing, which soon resulted in great agitation of the system, followed by epileptiform convulsions.

I saw her soon after the first convulsive paroxysm. Her eyes

had a fixed, vacant stare, threw her limbs about convulsively, face flushed, grits her teeth, moans fearfully, or shrieks, then the chest heaves out, limbs thrown back rigidly, the next moment the body assumes that opisthotonic rigidity resembling poisoning by strychnia. This paroxysm gradually simulated a kind of delirious mania, which in turn was followed by a convulsive paroxysm of several moments duration, and finally terminated in a condition resembling coma, in which she appeared unconscious, respiration hardly perceptible, surface cool, countenance calm and motionless, presenting the aspect of death.

In this condition I ordered her *vinum tabacci* 3j, every half hour or hour until the system was relaxed and nausea induced.

I returned in three hours after she had taken three doses of the medicine, and I found her completely relaxed, perspiring profusely, pulse slow and feeble, respiration much more natural, and perfectly conscious. This relaxed condition continued until eight o'clock in the evening, when she drank a cup of tea and slept well during the night. January 31, had no return of the trouble, was feeling only weak and exhausted. February 1, feels quite well, discharged.

CASE II.—February 7, 1869. I was called to see Mrs. H. aged thirty years, American. I found her having convulsive hysteria, similar in character and severity to the above case. I learned that she occasionally had such "spells," or attacks, which continued generally for several days, and often until all her neighbors were tired out nursing her.

I ordered her 3j *vinum tabacci* every half hour or hour until the system was completely relaxed, which occurred in about three hours. She continued in this relaxed condition about twelve hours, and no return of the paroxysm, but a speedy convalescence.

CASE III.—March 1st, 1869. I was sent for to see Miss G. aged thirty-five; single, German. I found the patient lying on her back in an opisthotonic condition, pulse almost imperceptible at the wrist, the beat of the heart so feeble it could scarcely be detected, the respiratory movements about three per minute, and so slight that the body was almost as motionless as a statue.

The arms were stiff and pressed firmly on the bed, requiring considerable effort to raise them; but after being drawn up, would remain in any posture or attitude for a long time. Pull-

ing the hair, or pricking the surface with a pin, gave no signs of consciousness. I learned from the previous history of the case, that she had occasional attacks of hysteria, occurring at her menstrual periods, and that twice previously had catalepsy, which continued for several days.

I prescribed vinum tabacci 3j every half hour or hour until the muscular system was completely under its relaxing influence. I saw the patient again in three hours; she then had taken three doses of the medicine with the happiest results, for consciousness had returned, breathing yet slow, but more natural, with an occasional deep sigh, the pulse and action of the heart returning with more vigor, the muscular system completely relaxed, slight nausea, and the body bathed in perspiration. This relaxed condition continued several hours, during which and after it had passed off there was no return of the trouble, and she made a rapid recovery.

I could enumerate other cases to the above, but these are sufficient to show the prompt and efficient action of tobacco in controlling, within a few hours, these troublesome affections, that without it, had previously, and might again continue for several days.

The rationale of the action of tobacco is by direct irritation of the nerves of the alimentary canal, followed by muscular contraction, as evinced in vomiting and the peristaltic action of the bowels. Besides this direct action, there is secondary or reflex action on the motor nerves, resulting in relaxation of the muscular fibers of animal life, and therefore overcoming the contraction that exists in these muscles during hysteric convulsions and catalepsy.

From the well known relaxing effects of tobacco, it has been used to overcome spasmodic action; but from the loose manner of administration, which was generally by cataplasms, or a decoction by injection, having frequently produced death, has no doubt prevented a more frequent and general use.

But in the officinal vinum tabacci we have a powerful remedy, of which a definite dose can be given to affect the system without endangering life. And in my hands has permanently controlled the muscular contractions in hysteria and tetanus, as well as safe and efficient in the relief of convulsions in children.

THE 'LANCET AND OBSERVER AND ITS EDITOR—DR. E. B. STEVENS.

TO THE EDITOR OF THE REPERTORY :

The readers of the November number of the Cincinnati *Lancet and Observer*, were certainly amazed at the amount of space devoted in that *valuable* periodical to my affairs. It is true the medical profession, in this part of the world at least, is now quite familiar with the influences which control this publication. I need hardly say that it is known as the organ of a party not insignificant as respects numbers, but marvelously small in intellect and intelligence, known as the Miami clique. In common with many others, I have heretofore supposed that Dr. Stevens, the editor, was a well-meaning but weak man, who was content to serve his masters as tool, having no capacity for any higher work in life. I now know that he is malicious as well as weak.

As he has attacked me without provocation, has misrepresented me abominably, and has refused me a proper hearing in his journal, it seems but just that I should exhibit the man in his true light and show how much meanness he conceals under an affected editorial candor and impartiality.

When Dr. Comegys' first paper appeared in the *Lancet and Observer* against me, I address the following friendly note to Dr. Stevens:

" 27 WEST EIGHTH STREET,
" October 8, 1870.

" PROF. E. B. STEVENS, M. D. :

" MY DEAR DOCTOR:—How much space will you allow me for a reply to Brother Comegys? I wish to say that I propose a scientific discussion of "Brain Tumors," and do not intend any personal allusions, except such as naturally grow out of the subject, and will not, I think, be offensive to your readers. If I use the material which I have been collecting against C. G. C. it will be put out in another form.

" Very truly,
ROBERTS BARTHOLOW."

To this note I received the following reply :

" PROF. BARTHOLOW :

" DEAR SIR:—I expect, of course, to allow you an opportunity to reply to Dr. Comegys. I trust to your idea of the proprieties, and propose to extend to you whatever space you need, only hoping you will be as brief as consistent.

"Please let me know during the week how much you will require.

"Very truly,
"EDWARD B. STEVENS."

319 ELM STREET, October 9.

I informed Dr. Stevens in reply that I would require from ten to twelve pages, and requested permission to use the matter for the secular papers, as Dr. Comegys had done. In answer to this communication Dr. Stevens wrote as follows:

"LANCET AND OBSERVER OFFICE,
"CINCINNATI, Oct. 17, 1870.

"PROF. BARTHOLOW:

"DEAR SIR:—I propose to allow you whatever space is necessary for a reply to Dr. C——. I *hoped* you would not ask so much, but I *accept* the situation. I cannot assent that you use your matter in the daily papers before its appearance in the 'L. and O.' I made the same stipulation with Dr. C——, except that he had the 'Wade matter' of the Enquirer all ready for press in the L. & O., but for some reason of his own suppressed.

"Please send me word whether you wish your matter to appear as 'Orig. Com.' or 'Corres.' My printer has been waiting some days on me and has half the number for next month in type.

"Respectfully, etc. etc.
EDWARD B. STEVENS."

In a few days after receiving this note, I sent the MS. of the first part of my article, and followed it in a few days with the remainder. Upon receiving the first installment of "copy," Dr. Stevens addressed me the subjoined note:

"PROF. BARTHOLOW:

"Your article goes to printer without note or erasure, and I thank you both for the guarded temper of your rejoinder thus far, as well as for your kind offer to place copies of L. and O. before the class, which I shall avail myself of.

"I frankly say to you that I can not entirely approve all you have said and done, but *that is inter nos*, and I *may* deem it proper as a journalist—though of that I am not decided—to make some editorial comments regarding this "fight," but I hope to do so *if I do*, without any fair charge of becoming a partizan in your personal affair with Dr. C——. You realize the difficulty of a man's retaining in this town his *self*, especially when parties interested are nominally his personal friends, on both sides. But I do not *mean* that *either* shall seduce me from what I deem independent and right.

"STEVENS."

The italics in these letters are Dr. Stevens', not mine.

When the November number of the *Lancet and Observer* appeared, it contained the following articles referring to my controversy with Dr. Comegys :

My reply to Dr. Comegys.

Editorial criticism on the case of Davis B. Lawler, reported by me in the number of the journal for December, 1869.

A reprint of Dr. Comegys' comments on the "Wade Case," from the *Enquirer*—a secular newspaper of this city.

An "anonymous" communication, signed "Kelpie," on a supposed mistake of diagnosis made by me at the Good Samaritan Hospital.

Editorial comment on, and approval of, another portion of Dr. Comegys' *Enquirer* article, which was reproduced in the editorial department of the journal.

A few days after the appearance of the *Lancet and Observer* I sent to Dr. Stevens a communication on the Lawler case, with the following note :

" 27 WEST EIGHTH STREET,
" November 7, 1870.

" PROF. E. B. STEVENS, M. D. :

" MY DEAR SIR:—I send the enclosed for the next number of the *Lancet and Observer*. It is a reply to your editorial comments on the Lawler case. I desire also to reply to Dr. Comegys' comments on the Wade case, and to your editorial matter on my dismissal from the hospital staff. Please inform me at your earliest convenience how much space you will give me for this purpose.

" Very truly,
" ROBERTS BARTHOLOW."

On the following day after receiving my MS., Dr. Stevens returned it with the following letter :

" LANCET AND OBSERVER OFFICE,
" CINCINNATI, November 9, 1870.

" PROF. ROBERTS BARTHOLOW :

" MY DEAR SIR:—I herewith return your MS., as I suppose you had expected I would do. It is not admissible. 1. My criticism of *you* was intended to be good-natured, kindly and courteous. You have an unwarrantable degree of confidence in your own information, judgment and capacity for diagnosis. I regarded the Lawler case a fair illustration of this, but I assure you I *did not* mean to be other than respectful. You have retorted with arrogance, and studied discourtesy—your dearest

admirer will admit that: take as illustration your fling at the misprint of *corner* for *cornu*. The veriest wayfaring man would have recognized the printer's fault. 2. I could not, in self-respect, admit your paper without entering fully into the controversy myself. You are certainly vulnerable enough for good sport, but I have no time or taste that way, and my readers, I know, are nauseated.

"It was my purpose to admit *nothing further* from *any party* on these controverted matters in which you, Comegys and the hospital are parties. But as you seem to regard the *Lancet* as doing you injustice, I waive all that *to you* and *to you* only. I am willing to open up the matter again only this far—you may furnish *one article* of 4—6 pages in reply to *all* the objectionable points of November, but you must confine yourself to a statement of *your view of the facts*—no controversial platitudes or details. *Such* a paper, furnished any time within a week, will be admitted with pleasure.

"In conclusion, permit me to say that all my personal friendship, my notions of right, my *Editorial* sense of propriety or "impropriety" have been so long under my own censorship, I shall probably continue in the same way for the future.

"Very respectfully, your obedient servant,

"EDWARD B. STEVENS."

It is needless to say that I declined to make a reply hampered by such conditions. The space permitted me—4 to 6 pages—is inadequate to deal with "*all* the objectionable points for November." To omit "controversial platitudes or details"—if Dr. Stevens means anything but to display what he considers a striking collocation of words—is to deprive any reply I might make of point or purpose.

Notwithstanding Dr. Stevens had resolved "to admit nothing further from any party," owing to the "nauseated" condition of his readers, we find in the December numbers of his journal a continuation of the controversy by Dr. Comegys. The utter insincerity of Dr. Stevens is thus conspicuously shown throughout. His pretence of editorial fairness and candor is a mask to cover the meanest kind of malice.

That the reader may have all the facts before him, I subjoin my reply to Dr. Stevens' assault on the case of Davis B. Lawler. In the next number of the REFERTORY, with the permission of Dr. Thacker, I purpose to review this interesting case. I will present again the sphymographic trace and the autograph, and will make an analysis of the symptoms and of the *post mortem*

developments, and show conclusively that Dr. Stevens' ignorance is only equalled by that of the Cincinnati Trousseau—the pompous and inflated imitator, but, alas! only imitator in a very gaseous sense of the Paris clinician.

THE LAWLER CASE.

Editor of Lancet and Observer :

In your journal for November you follow a paper of mine with some editorial comments, to which I beg to submit some words in reply. Under the circumstances, it will not be inappropriate for me to remark on the indelicacy of your proceeding in commenting on a paper of mine appearing in reply to a previous communication of a personal character which you had admitted without remark to your columns. Your "sense" of editorial fairness is not exhibited only in this partizan defence of your correspondent, Dr. Comegys, but also in the criticisms which you offer on a case of mine, the details of which appeared many months ago in your columns. My criticisms on Dr. Comegys' published paper are "inappropriate," but you have no words of condemnation for the scurrilous article written by Dr. Comegys; not only so, but you republish more matter of the same kind by the same person from a secular newspaper, and you give space to an "anonymous" (?) communication intended to add to the other personal abuse of me with which that number of your journal is filled. Making yourself a partisan in this way, you can not shelter yourself behind your editorial privilege.

You start with an assumption which you will find it hard to maintain, viz. : "The accurate diagnosis of brain lesions has, thus far, been generally admitted as always difficult—mostly impossible." In this sentence you but echo the words of Dr. Comegys. In the very article on which you thus comment, ample proof is afforded that many cases, *even of brain tumor*, are diagnosed with the greatest certainty. Hence your opinions on this topic are just as accurate as your correspondent Dr. Comegys', and therefore do you as little credit. With the light shed on brain diseases by modern researches, it is almost incredible that a clinical teacher and a journal editor should gravely inform us that it has been "generally admitted" the "accurate diagnosis of brain lesions is mostly impossible."!! Such an opinion unmistakably indicates ignorance of what has been

accomplished in this direction. If further evidence were needed to establish the editorial ignorance of this topic, the editorial comments on the Lawler case would be conclusive. Says the editor, "Dr. Bartholow makes no mention in that paper in his diagnosis of any suspected brain tumor." For the eminently satisfactory reason that *there was no brain tumor*. Like the "swift witness" that he is, the editor, in his eagerness to defend Dr. Comegys, is not much concerned to be correct in his statements. If he will consult the paper on Mr. Lawler's case again, he will find that there was wide-spread calcareous degeneration of the arteries of the body generally, and of the cerebral arteries especially—not a very remarkable phenomenon considering the advanced age of the subject (82). A part of the left *choroid plexus* had undergone the same calcareous degeneration, forming a distinct calcareous mass, globular in shape, and about a half-inch in its long diameter. Is the fact known to the editorial mind that the choroid plexus is cylindrical in shape, and that a mineral mass, produced by a degeneration of its arteries, would be apt to assume such a form as I have described above? This calcareous mass, then, being dislocated into the middle *cornu* (not *corner*, O learned editor!) of the left lateral ventricle, compressed the *vena Galeni*. The result of this compression was, accumulation of fluid in the left ventricle, especially in its posterior cornu, and the consequent hollowing out of the left hemisphere of the brain. "Any deposit compressing the veins of Galen," says Ramakill, "which bring back the blood from the ventricles of the brain, is sure to lead to accumulation of serosity within those ventricles." If the editor will employ his earliest leisure in reading Sir Thomas Watson's lectures on "Chronic Hydrocephalus," he will find some curious cases there recorded of this disease occurring late in life—amongst others, the case of the celebrated Dean Swift, who died at the age of seventy-eight of water in the ventricles. Compression of the veins of one side, would cause accumulation on that side. I was correct, then, in my diagnosis of "lesion of some part of the left * hemisphere." This case, then, is peculiarly unfortunate for your purpose, for the *post mortem* disclosures substantially confirmed my opinion as to the seat of the lesion. Vertigo, as in Mr.

* Dr. Stevens in saying "right" hemisphere copies a misprint in my article, which should have been "left," as it is elsewhere printed in the same article.

Lawler's case, was a symptom in Dean Swift's; but in the former, as I have correctly indicated, the "irregular supply of blood to the brain, from obstruction and regurgitation at the aortic orifice," was concerned in the causation of this symptom—a condition of things which any one familiar with the clinical history of such cases can readily appreciate.

You not only make use of the cerebral lesion in the Lawler case to point your criticism, but you take up the cardiac lesions in the same patient for the purpose of discrediting my report. You attempt to show a discrepancy between my account of the symptoms referable to the heart during life, and of the *post mortem* appearances found in that organ. You "do not offer this commentary in any sense of unkind criticism on Dr. Bartholow, simply to point out the extreme uncertainty and difficulty of making any exact diagnosis of those obscure cases of brain lesion," yet, "in this paper we notice that while Dr. Bartholow has diagnosticated most formidable valvular lesions in the heart, suggesting unmistakeable mitral and semi-lunar insufficiency we *do not find recorded* any of those cognate symptoms which ought to accompany such conditions. The patient died aged 82, and yet with this twenty years of disease of this character, we hear of no oppressed breathing, no enlarged liver, no general dropsy!" What has this to do with the question of brain tumor? What is your criticism on the heart lesion for, if it is not intended to discredit my report? But in this your zeal outruns your discretion, and, also, your knowledge. Narrowing and obstruction, and regurgitation at the aortic orifice, the merest tyro knows do not produce dropsy. The mitral murmur observed during life, was ascertained after death to be caused by calcareous degeneration of the *chordæ tendinæ*, and by some calcareous plates on the valves themselves. But the mitral valves were nevertheless sound enough to prevent regurgitation through the auriculo-ventricular orifice. Large calcareous masses (you will probably call them *cardiac tumors*) striking together every time the valves closed, would, it is not difficult to conceive, cause a distinct murmur with the first sound.

Mr. Lawler is well known for many years to have had an exceedingly irregular and intermittent pulse. The sphygmographic trace, which I took, indicates this. The cardiac lesions found, are not at all uncommon for that period in life. Only

they who are not familiar with such pathological conditions think them unprecedented.

ROBERTS BARTHOLOW, M. D.
27 West Eighth Street, Cincinnati, O.

NOTES ON A CASE OF STERILITY FROM OCCLUSION OF THE INTERNAL OS.

By JAS. T. WHITTAKER, A. M., M. D., Professor of Physiology, Medical
College of Ohio.

When the celebrated Madam de Stael, in the hope of eliciting a compliment, inquired of the first Napoleon who was the greatest woman of France, it is well remembered how this childless woman was astounded with the answer, "She who has borne to France the greatest number of sons." That Napoleon was consistent in his belief is evidenced by his treatment of the unfortunate Josephine.

It may be stated in general terms that the desire of fecundity is a characteristic of the moral purity of a society; indeed, a doctrine of one of the modern religious sects, Swedenborgian, considers every coition practiced without the express intent of pro-geniture a direct act of adultery.

But it was among the ancients that sterility was considered of most disgrace. In India and Egypt such females were subjected to every indignity, and in China and Arabia the barren woman is still regarded much in the same light as is the drone in the economy of the bee-hive. That this should be the case in China is especially paradoxical, inasmuch as there exists no people on earth who place so little value upon the life of the new born, none among whom the crime of infanticide is so fearfully prevalent.

That sterility was a deep disgrace among the Hebrews is evident throughout the whole of the Old Testament, where it is regarded as a punishment from Heaven. "But Sarai was barren, she had no child," * is the melancholy comment upon her condition, and the highest blessing from on high was that considered, which rendered her fertile after she was "old, and well stricken in age, and it had ceased to be with her after the manner of

* Genesis, chap. xi. verse 30.

women."† The scholar in Scripture history needs no reminder of the fact, that the benedictions and maledictions upon women in its entire text referred almost always to fecundity and sterility.

It is moreover still a law among certain sects of the Jews, where their religion is practiced in its ancient rites, to put away a wife who has remained barren for a certain length of time; and no more pitiable spectacle could be conceived than that which the author has on several occasions observed, of these poor creatures from Silesia, crouching around the door of the clinic room at Vienna, and tearfully pleading of the professor the performance of any operation in relief of their condition.

Of the tenure of the marriage vow which a mutual affection for a mutual offspring ensures, and of the peculiar condition of a childless home, interesting questions in sociology, it is not our province to speak. The marked mental depression of the barren woman herself, however, is an element of the affliction pertaining to a province of medicine, and demanding extra-exertion in relief.

What an extent this melancholia may attain, and how simple and easy of execution are the means of complete relief in certain cases, let the following instance record.

An intimate friend of the author was himself almost reduced to a state of melancholy, by the deplorable condition of his wife. She, a young woman, thirty-three, well proportioned, intelligent when diverted from her own condition, and now, as always, in excellent health, except at the menstrual periods. These she has had regularly for the last seventeen years, the duration of her marriage, but always with exceeding pain and distress.

During the past ten years she has been under the charge of several prominent gynecologists in the East, and upon two separate occasions efforts have been made to dilate the cervix with sponge tents. Complete success has never attended these efforts: twice she narrowly escaped a dangerous peritonitis, one attack of which confined her to bed for four months; and once a severe parametritis well-nigh proved fatal.

Despondent and gloomy from the first, when the faint hopes of success, buoyed by the promises of her physician, so signally sank, she gradually settled into a condition of melancholy with

* Genesis, chap. xviii. verse 11, and chap. xxi. verse 2. See also, Genesis, chap. xx. verses 17 and 18, for a lesion of the character of the case described.

almost monomaniacal desires for a child. An orphan was then adopted, and for a short time considerable relief was experienced. But, as the child grew, presenting none of the resemblances to either herself or her husband, her despondency again resumed, and became even more profound than before. During the past five years she has made three distinct attempts at suicide, by hanging, by poison, and by the knife, the last quite recently, and throughout the whole of this period she has required constant supervision.

This is the history in brief, lacking the impressiveness and deep earnestness which only one so profoundly interested in her condition as its narrator, her husband, could adequately convey.

The author had first finished some studies upon the secretion and nature of the seminal secretion of the male, and had collected a large number of statistics from reliable sources (for it would seem to be a field of greatest temptation) on artificial generation. These were placed in her husband's hands.

In about a week after this, Sept. 29. I was called to her house No.—— East L—— street, to make an examination. Except an enfeebled mental condition, as evidenced in that peculiar blankness of expression so characteristic of this state, my patient was in a state of perfect health. Her last menses had passed with the usual distressful symptoms; the period of my visit was about the middle of the interval.

There was fair mammary development, active sexual desire, perfect external organs, and a vagina normal in every respect. About one and a half inches from the vulva, the finger came in contact with a long slender conical cervix, dimpled by a circular minute external os. Was it a case of prolapsus, or infra-vaginal hypertropia? In tracing up the cervix at the distance of fully two inches, the organ bellied out upon all sides into the body of the uterus; behind, filling up the posterior vault of the vagina, was a firm resistant tumor; to the right, the protrusion was greater than to the left. Fibroid or uterine, which? To the left, at the side of the uterus, reposed a small, soft, rather resilient mass, communicating a distinct sense of pulsation, pressure upon which was attended with pain. The entrance of the sound would have decided all these points at once; but the entrance of the sound was an impossibility. Its bulb would not even penetrate the external os. Reposition was then attempted with the patient

upon her abdomen; the tumor slowly yielded, and the posterior and right lateral surface of the uterus could be traced in a right line. It was then a case of retro- and right latero-flexion, with cervical hypertrophy and occlusion. The pulsatory mass to the left, was considered a dislocated ovary, and the pain sometimes experienced in coition met a ready explanation in the mechanical injury which it sustained as the male organ passed the left side of the uterus to the vaginal *cul de sac* (the *vagin accessoire* of the French). The pain and protraction of menstruation, were surely attributable to the difficulty of menstrual escape.

My own hopes were so sanguine as to infuse courage sufficient to induce her to present herself with her husband at my office. With great difficulty, but no pain, I succeeded in passing the external os with Lente's finest uterine probe, and traversing the entire length of the elongated cervix to the internal os. Every possible manipulation in every position, even with reposed fundus, failed in penetrating the os internum. The probe invariably doubled upon itself, and finally occasioned such pain, though every violence was carefully avoided, as to compel me to desist for the day.

From the deft hands of Wm. Antenrieth, one of our surgical instrument makers, I then obtained a set of Peaslee's uterine dilators, manufactured for me according to the design and plates in a recent number of the *New York Journal of Medicine* (firm steel sounds with a tapering extremity and guarding bulb, of six different sizes), and, armed with these, resumed efforts at dilatation.

In about fifteen minutes dilator No. 1 penetrated with difficulty. It was followed by Nos. 2 and 3, when I was again compelled to desist. This was on October 6th. Strong hope was entertained that full dilatation might be secured before the 12th or 13th, the period of the next menstruation. This was not realized, however, and the period came and passed with all the usual trouble.

October 20th.—After the second trial No. 1 was made to penetrate with ease. As the point struck the fundus in every case, she complained of sharp, sickening pain of, however, but momentary duration.

In two more visits the sound of Simpson could be readily passed after the successive entry of all six dilators, and almost

totally without pain. Long tents of Laminaria were now pushed completely through the internal os into the uterine cavity. The supervention of quite severe pain, with external tenderness and fever, occasioned another interval of four days, and resort to the usual remedies.

November 1st.—The third tent of Laminaria is now substituted by the compressed sponge; sleeplessness, but no pain.

November 8th.—Complete dilatation; the fundus uteri can be pushed down, by supra-pubic pressure, upon the point of the right index finger introduced into the uterine cavity. Just in time, then, for the introduction of the seminal secretion, for, according to Raciborski, the most suitable period for impregnation is just before menstruation; its appearance being a sign of previous escape of the ovule, I was desirous of attempting artificial introition, after the manner of Giraud. But my friend had in the meantime posted himself on the literature of the subject, and insisted on a trial *per modum naturale*, to which I was fain to consent. On November 15th he presented himself with the joyful intelligence that the period had arrived and passed without a show of menses; moreover, that his wife had or fancied mammary sympathies, and certainly on two occasions experienced morning nausea.

From this time on to the present, December 10th, when the second period came and went, and "left no sign," the probabilities of pregnancy have steadily increased. Her general condition has most decidedly improved; her weight has increased at least ten pounds, and her mental amelioration is not to be measured by avoidrupois.

The success which has attended this case has brought another of perhaps similar character, to the hands of the author; and as it is highly probable that artificial impregnation will be permitted, some interesting points of recent development, connected particularly with the seminal secretion in health and disease, are reserved to a future communication.

DR. LAENNEC, physician to the Necker Hospital, Paris, first introduced the stethoscope in the year 1818.

REV. MR. ABEEL informs us that in the Fuh-kien Province, China, forty per cent. of the female infants are sacrificed by their mothers.—*Med. Record*.

PROCEEDINGS OF THE ACADEMY OF MEDICINE.

Reported by JAS. T. WHITTAKER, M. D.

MEETING, November 28th.

Dr. Gobrecht regretted the absence of Dr. Richardson, who had promised if present to make a statement concerning the delivery of a litter of kittens, which he had observed confirmatory of the remarks of the speaker on the dog. A cat was delivered of six kittens—each was born in the membranes. The mother, in every case, chewed off that part of the membranes first which was in contact with the kitten's mouth and nose; and she always entirely freed each kitten, and completely cleaned it, before the next was born. A feature of interest was the increasing care with which she minced the cord as she approached the kitten's body.

Dr. Whittaker exhibited the plates of Hyrtl, representing the inosculation of bloodvessels upon the surface of a compound placenta in two cases of triplets, in which the observation had been made that such inosculation implies a similarity of sex.

Dr. Thornton spoke of three kinds of placenta in twins—one in which each is separated from the other; one in which they are united, but without anastomosis between the vessels of each; and one in which they are united with such anastomosis. In the latter case two germs exist in one ovule, and have, we might expect, a similarity of sex and disposition. The mere fact of anastomosis, though claimed by Hyrtl as evidence sufficient to establish unity of sex, may scarcely be admitted as proof positive without the ratification of a great number of observations.

Dr. Mackenzie, of the Section on Morbid Anatomy, presented the following Report on Inflammation:

The author prefaced his essay with remarks upon the extent of study upon this subject, the character of investigation, and the reason of its interest from its importance in pathology. Notwithstanding the amount of labor so devoted, its essential nature remains still an unsolved problem. The various theories previous to the time of Harvey, and subsequent up to the announcement of Virchow's cell doctrine, were cursorily reviewed. In 1858 Virchow placed the cell pathology in the same position as

Schwann had previously placed it in physiology. This overthrew the theory of blastema and exudation; Virchow's proliferation of cells, particularly of the connective tissue group, substituting exudation. Proliferation is caused by a formative irritation. Pus cells may arise from the epithelial structures, or from the connective tissue in the manner detailed. This very plausible and fascinating theory, placing all pathological processes under the control of cell action, and thus reconciling them with physiological processes, became one of general acceptance. Three years ago they were attacked, and for a time almost overthrown by the researches of Cohnheim, a pupil of Virchow, who developed, by his experiments, principally in the cornea the so-called migration theory, the escape of the white blood corpuscles and their identity with the pus cells. The *modus operandi* of its results are next described in full. The dilatation of the vessels is ascribed to a paralysis of the vaso-motor system, the slowing of the blood current, and peripheric direction given to the cells being consequent thereon.

The author then exhibits that this theory is not by any means original with Cohnheim, as is evident from the experiments and writings of Waller in 1846, which, as Stricker has recently remarked, anticipated Cohnheim in almost every respect. Addison in 1849, and Zimmermann in 1852, expressed their belief that pus cells were but extravasated white blood corpuscles. Their views, however, like those of Waller's remained comparatively neglected—it being left to Cohnheim to create among pathologists that interest in the subject so necessary to its thorough investigation.

Since the publication of his article several have repeated his experiments, but without uniform results. Kremiansky and Koster have confirmed them. Valpian and Hayem conclude they are well worthy of attention. Comt and Rauvier return, with some modification, to the views of Virchow, following the opinion of Beale, who for many years has held the doctrine that inflammation affects all germinal matter, and produces in it active changes. Being unable to trace leucocytes from the dilated stomata, they conclude that the processes occur in the following order: Hypertrophy of the nucleus; increase and afterwards division of the protoplasm; destruction of the secondary membrane of the cell; destruction of the fundamental substance

(intercellular); establishment of embryonic tissue; formation of new vessels. After the formation of the embryonic tissue, the new growth may develop into connective tissue or degenerate, if the supply of nourishment be obstructed, into pus cells. These result from impoverishment of nutrition of the embryonic cells. The nuclei divide, but owing to deficient vitality the protoplasm remains unchanged, so that a cell is produced with several nuclei.

Quite recently a volume on inflammation has appeared from the pen of Stricker, a distinguished experimentalist of Vienna. Upon irritating the cornea and tongue of the frog he was enabled to demonstrate that the cells of the connective tissue underwent proliferation. He also examined under the microscope the tail of a tadpole, which had previously been subjected to the influence of woorara. Upon irritating the tissue he observed an accumulation of colorless blood cells at the seat of irritation, and soon many of them passed through the cell wall. He therefore admits that pus corpuscles may proceed from the bloodvessels, but also maintains that they may proceed from other sources; and he draws the conclusion from his experiments and observations that the difference noticed in the characters of pus corpuscles in all probability depends upon the difference of origin. He states that as the result of inflammation not only connective tissue cells multiply, but muscle cells, nerve cells, and epithelial cells, but integumentary and glandular. In regard to the formation of new tissue, as the result of inflammation, he seems to lean decidedly towards the cellular views of Virchow.

Still more recently several lectures upon the subject of analytical pathology have been published in the *Medical Times and Gazette* by Dr. Moxam of Guy's Hospital. The lecturer seems to adopt mainly the views of Virchow with certain modifications which the essayist briefly detailed.

It hence follows, remarked the essayist in conclusion, that pathologists are by no means agreed as to the essential nature of inflammation. The medical world is for the most part divided between the theories of Virchow and Cohnheim, and so long as such differences exists between celebrated authorities, the subject must be considered *sub judice*, and dependent for its solution upon the future researches of scientific men.

Several specimens, exhibiting kidney lesions of amyloid and

granular character, and a microscopic demonstration of fibroid lung, were shown.

MONDAY EVENING, December 5th.

Dr. Palmer of the Section on Diseases of Women and Children, presented the following :

During the early part of the session a vulvar pad was referred to the section for examination and report. The design of the pad is to secure perfect contact of the injected fluid with every part of the vaginal wall. The report characterizes the theory as good, but the practice not entirely devoid of danger of penetration of the uterus and consequent distension.

Next is discussed some points in the local treatment of endometritis. To insure efficiency, the prime consideration is to have a clean surface for application. The plan of Byford by the swab and suction tube, and that of Nott by the double canula are detailed, and the objections to which they are subject. The most thorough application is secured by a modification of Patton's urethral reflex tube of the essayist's design. A silver tube 7 to 8½ inches long, is adopted to an accurately fitting syringe of ½ oz. capacity. The bars of the tube are reduced from 6 to 4. The cap is perforated by nine extra orifices. The accompanying working of the syringe prevents the admission of air, and the open side bars secure free reflux, and thus render accumulation and distension of the uterine cavity impossible. Moreover, the syringe may be refilled, if necessary, by simple detachment of the instrument without drawing the canula.

• Most cases of endo-metritis are characterized by marked enlargement of the uterine cavity, and its walls are generally covered with blood, mucus, epithelium, etc., so that an injection without preliminary removal of these substances does not reveal the diseased surfaces. It has been found that salt water, one to five grs. to the ounce of water, at a temperature of 98 degrees, most nearly resembles the natural secretion, not only of the vagina and uterus, but of the eye, pharynx, peritoneum, etc. With a solution of this strength the author has treated six patients—one alone receiving 18 injections. In no case was the pain greater than that attending the introduction of the sound.

The safest method of cleaning the surface is by the probe and cotton. After thorough cleaning, the two agents most recom-

mended are Churchill's tinct. iodine, and dilute carbolic acid. Whatever be the remedy employed, the canula is a safe and ready means. The susceptibility of the uterine surface is to be first carefully tested, and the patient, after the injection, closely watched.

Many nice points connected with the subject, as the choice of remedies, the frequency of their use, the time of their employment, the seat and extent of the disease, the author refrained from discussing for want of time. Proper position—dorsal decubitus—during the injection and rest after it, are of course essential. As to the risk attending, no one can positively prognosticate in an individual case. All admit danger in rare cases.

AMPUTATION AT THE SHOULDER.—W. F. McNutt M. D. (*Cal. Med. Gazette*), thus describes his method of amputation at the shoulder joint: On the night of Nov. 23d, 1863, he went on board the steamer "Black Hawk," and found a man whose left arm was so severely injured by a six-pound shell that amputation was necessary. Having no one with him that he could persuade to attempt the compression of the artery, or even to have anything to do in any way with the chloroform, the shoulder was amputated as follows: Chloroforming the patient thoroughly, the knife was passed close by the acromion, gliding it over the humerus to appear at the posterior fold of the axilla, and cutting outwards and downwards, the posterior or external flap was completed. An assistant holding the flap up, he opened the joint, forced the head of the bone outward, and pressed the knife behind it and close to the shaft of the bone. Paymaster Whitehouse then taking the arm, Dr. McN. placed his hand in the axilla, and, with the palm to the flap, the thumb passing along the back of the knife, he had a firm grasp of what was to be the anterior or internal flap, which of course contained the vessels; then cutting on he finished the internal flap. Taking up the forceps the arterics were seized and tied. There was scarcely any hemorrhage. As he had no one to keep the patient under chloroform rapidity was a great desideratum. Under the same embarrassing circumstances, he would feel inclined to operate in the same manner, rather than that of Verneil's method, which is now in vogue in France.

INDURATION OF THE SPINAL CORD.—J. Netten Radcliffe, M. D. (*Med. News and Library*), in his paper on "Diseases of the Spinal Cord" remarks: Like the opposite condition of softening, induration (sclerosis) of the spinal cord is one of the consequences of myelitis, chronic or acute; of the chronic form more especially. Induration of the cord is generally associated with

atrophy—atrophy often more marked in the white matter than in the grey—and with a condition so curiously bloodless that a section is not unlike that of white of egg boiled hard. In its highest degree the cord may have a leather-like or fibro-cartilaginous hardness and consistency. Induration is a much less common change than softening; it has no symptoms by which it can be distinguished from softening; and it is often met with when it was not expected, and under very different circumstances, as after acute myelitis on the one hand, or after long-standing epileptic disease on the other.

Book Notices.

THE PHYSICS AND PHYSIOLOGY OF SPIRITUALISM. By WM. A. HAMMOND, M. D. New York: D. Appleton & Co. Cincinnati: R. Clarke & Co. Pp. 86.

This little book should be read by every physician and intelligent person. It completely exposes the modern humbuggery of spiritualism. If any one is in doubt about its truth, we think this treatise will resolve them.

In closing the monograph the author states that, "Even if bodies had been raised in the air by agencies unexplainable, even if some one had read writing through several thicknesses of paper, even if others had been bound and unbound in a way unknown to us, even if knocks had been heard whose sources could not be ascertained, even if the causes of all the phenomena of spiritualism were entirely beyond our present knowledge—there would be no proof that spirits had anything to do with them. On the contrary, the hypothesis of spirits is altogether the least plausible which could be suggested. The phenomena and the explanation have nothing in common."

It is most remarkable how uniformly man, from the earliest times to the present, has ascribed to supernatural agencies all phenomena he could not understand; and although his spiritual causes have thousands of times been overthrown, yet even during this enlightened age he is as ready as ever to resort to them to resolve his difficulties. What we regard now as the most common phenomena, as eclipses, storms, etc., were once supposed to be the work of divinities, and from hence sprung the heathen mythology.

SPECIFIC MEDICATION AND SPECIFIC MEDICINES. By JOHN M. SCUDDER, M. D., Professor of the Principles and Practice of Medicine in the Eclectic Medical Institute. Cincinnati: Wistach & Baldwin. 12mo. pp. 253.

Although the author of this work is what is termed an "eclectic," yet he is an intelligent gentleman, and has devoted much attention, as is evident on every page, to the subjects of which it treats.

In the preface the writer says: "Specific medication requires specific diagnosis. We do not propose to teach that single remedies are opposed to disease according to our present nosology. These consist of an association of functional and structural lesions, varying in degree and combination at different times, very rarely the same in any two cases. To prescribe remedies rationally, we are required to analyze disease and separate it into its component elements, and for these we select the appropriate remedy."

The book is devoted mainly to a description of the therapeutical properties of our indigenous materia medica, and can be consulted with

great advantage by all desiring information in that respect. Besides, it is briefly treated of—specific diagnosis, administration of medicines, form of medicine, preparation of remedies, classification of remedies, etc.

GALVANO-THERAPEUTICS. The Physiological and Therapeutical Action of the Galvanic Current upon the Acoustic, Optic, Sympathetic and Pneumogastric Nerves. By WM. B. NRETEL, M. D. New York: D. Appleton & Co. Cincinnati: R. Clarke & Co. 12mo. pp. 161.

This little book is a part of a work the author is preparing on the galvanic current in its relation to physiology, medicine and surgery. He hopes to convince the reader in its pages that even the treatment of nervous diseases has recently made great progress, and that, to insure success, it must be based on the knowledge of physics and physiology.

The high position which the author holds is a guarantee of the value of the work.

LECTURES UPON DISEASES OF THE RECTUM, delivered at the Bellevue Hospital Medical College, Session of 1869-70. By W. H. VAN BUREN, A. M., M. D. New York: D. Appleton & Co. Cincinnati: R. Clarke & Co. 12mo, pp. 164.

This work will be found a most valuable one upon a most important class of diseases located in a part of the body whose offices, although not esteemed, are very necessary.

We find treated in the lectures hemorrhoids, polypus, prolapsus ani, abscess, fistula in ano, fissure or irritable ulcer, stricture of the rectum, cancer, means of exploration, neuralgia, atony, impacted feces, hygiene, special therapeutics, etc.

THE PHYSICAL LIFE OF MAN AND WOMAN. Advice to both Sexes at all Periods of Life, etc. etc. Part of the rather lengthy title of a "Compendium of the Laws whose Observance conduce to Health and Happiness, and whose Infraction to Disease and Misery." Cincinnati: National Publishing Company. 12mo. pp. 432.

Now, exactly why we were selected to "do" this book we know not at all. Having been suckled at the medical mamma more than a quarter of a century ago by a staid old parent, whose milk had long since curdled by the storms of life, and having been cradled in an age of the past, when, in consequence of the moral depravity supposed to be universally prevalent, instead of a lullaby a wail was the order of things for an infant, it is hardly to be expected that we can regard a production of this kind with the charity and liberality of sentiment which is said to characterise the offspring papped upon the milk of human kindness.

But we begin to weary of our lugubriousness. We have howled in, yelped at, and wept over modern Jerusalem, its vice and degradation, even as we had been trained to do. We have prophesied its speedy downfall and utter annihilation in our infancy, youth and age, and lo! Jerusalem hearkens not, standing still in all the insolence of her pinnacles, much after the persistency of the Vatican of Rome, in spite of the prognostications of the anointed John Bishop Hall.

As characteristic of wisdom in our age, then, we hasten to make a change, and, having divested ourselves of the smear of prejudice, once regarded as the holy ointment of prophecy, we begin to see more clearly into the divers doings of life. This we are led to do all the more willingly in such matters as the present, as we observe the tendency of the best medical authorities towards a far greater liberality of sentiment than would have been tolerated but even a few years ago—as, for instance, the high encomiums bestowed in a recent number of *Edinburgh Medical Journal* upon the work of Bergeret on conjugal sins.

The volume before us is a plain, and, with few exceptions, decorous

treatise on the physical laws governing the relations of the sexes towards each other.

These subjects are confessedly of the highest importance, and yet, for various reasons, their popular discussion is attended with peculiar difficulty. From their very nature they must be treated with the utmost tact and delicacy, and it must be apparent that the object of the writer is simply to give needed information—to put the reader in possession of the facts of science with regard to the matters discussed—and not to feed the prurient fancies of a vulgar mind.

This is the manner in which, until recently, these subjects have *not* been discussed. It is territory which has long been the favorite habitation of quacks and medical mountebanks, who have rendered the atmosphere so foul and unsavory that physicians of character and ability have been slow to enter it.

But if the nature and the history of the discussion of these questions have rendered their presentation difficult, these same reasons cut off those who need to be informed from other sources. They are matters which young people hesitate to inquire about from those who are older. The daughter shrinks from seeking information even from her mother, and the mother herself but too often has little or no knowledge; or, still worse, *wrong* knowledge to impart, and thus the maiden becomes a wife, totally unprepared for the perils of her new relations.

This whole subject has of late received the attention of some of the most distinguished members of the profession in England, France, and Germany, and has called forth several works from authors of the highest professional character and reputation. Of these perhaps the most widely celebrated are the works of Pye Henry Chavasse of the Royal College of Surgeons, London, entitled "*Advice to a Wife*," and "*Advice to a Mother*." These admirable works, the most complete and highly commended ever published on this subject, have been made the basis of the present volume. To these have been added, part first, "*Advice to Maidens*," and part third, "*Advice to Man*," compiled mainly, but with revisions and additions, from the most recent French and German works.

To the free, if decent, discussion of all these subjects, even before the multitude, no reasonable objection could possibly be alleged. But to some of the numerous incidents and anecdotes so freely interspersed to render the work more saleable by making it sensational, most decided objection is urged. And yet, such is the strange composition of human nature that, were we compelled to write a review of the book for a secular journal, we should refrain from entering the criticism just made. It savors too much of the "N. B. These pills should *not* be taken during pregnancy," etc.

Moreover, it will be readily granted that advice to a Man, or even a Wife, though "couched in language that shall not offend the most fastidious delicacy," is nevertheless not advice fit for a maiden's ear.

"Knowledge is safety," as so strongly urged in the Introduction, but it must not be forgotten that knowledge, like diet, is to be suited to to the age. "Milk for babes, meat for men," is a quotation of force enough.

That portion of the work, then, which emanates from the trusty pen of Chavasse needs no further commendation. It has already twice or thrice passed through the fire. From the other part, compiled from the various modern writers, praiseworthy enough in places, passages might be selected which are of highly dangerous nature, and which should be expunged.

Perhaps we can not better conclude than with the facetious answer recently made by a friend to our interrogatory as to the authorship and character of the book:

"*Sired by an Englishman, P. H. Chavasse, but damned by the French and the Dutch.*"
W.

BOOKS FOR LITTLE FOLKS AND LARGER ONES. Published by Lee & Shepard, of Boston. For sale by G. E. Stevens & Co. Cincinnati.

THE second volume of "The Little Prudy Series," by SOPHIE MAY, has been issued. It is entitled "Little Prudy Keeping House," and is a cleverly told story.

"THE Social Stage" is the title of a volume of original dramas, comedies, burlesques and entertainments for the parlor, the school and public exhibition, by GEORGE M. BAKER. Mr. B. is very profuse in this sort of literature. It is as good in quality as it is abundant in quantity.

A story that will stir the adventurous spirit of boys has appeared from the pen of JAMES D. MILLER, the author of "The B. O. W. C.," and the "Boys of Grand Pre School," two of the best juveniles published. It is entitled "Lost in the Fog." It has the genuine salt sea flavor.

"NATURE'S ARISTOCRACY; OR, BATTLES AND WOUNDS IN TIME OF PEACE," is the title of a volume by Miss JENNIE COLLINS. While Miss COLLINS' philosophy might be profitably modified, her pathetic stories of the hardships which factory and shop girls, and other unfortunate people, undergo in the struggle of existence, need no retouching; and if they serve to kindle sympathy and consideration in the hearts and minds of those who employ labor or have wealth to expend in mitigating human suffering, they will have accomplished a good purpose.

"The House on Wheels; or the Stolen Child," is the odd title of a volume in which the marvelous adventures of a lad named Adelbert, who was carried off by the Gypsies, are told with graphic embellishments. It is translated from the French of Madame DE STOLZ, and illustrated by EMILE BAYARD. It is one of the most original and picturesque books of the season.

A VERY interesting volume is that of Mr. RUSSELL H. CONWELL, under the title of "Why and How." It relates to China and its people, abounds in sketches of travel there, describes cities, and towns and the social customs of the Chinese, and explains why it is that the Chinese emigrate and the means they adopt to reach America. He shows that emigration has been unnaturally stimulated by systematically false representations of wealth and great wages to be had in the New World, and the kind treatment which the emigrants receive here. Mr. CONWELL has had large experience as an Immigration Agent, and writes from fullness of knowledge.

THE work of M. G. DE LA MONTE, intended for students of music and beginners on the piano, and published by LEE & SHEPARD, of Boston has had the almost immediate honor of a fourth edition. It contains a very complete history of music, its growth and development from the earliest historic times, and an excellent dictionary of musical terms. It is not overloaded with exercises, the author believing that more is gained by the perfect practice of a few judiciously chosen exercises than by half-studies of numerous passages. The great difficulty with elementary text-books is that the authors persist in doing too much. They sacrifice quality to quantity.

Editorial.

COMMENCEMENT OF VOLUME IV. —With the beginning of the new year the MEDICAL REPERTORY enters upon its fourth volume. It is no longer an experiment, but with the assistance of many kind friends,

to whom we feel highly grateful, it has proved a success. We do not believe that ever any medical journal in the West, in the time, attained to a greater degree of prosperity. In fact, we know that no western journal has near the circulation that it has, although there are others that are more profitable peculiarly on account of their much higher price.

At a late meeting of the Journal Association publishing the MEDICAL REPERTORY, J. A. Thacker, M. D., was unanimously elected editor for the ensuing year, and D. D. Bramble, M. D., unanimously chosen agent. R. C. S. Reed, M. D., A. J. Miles, M. D., and D. D. Bramble, M. D., were continued the publishing committee. As the immediate management will continue the same during the fourth volume as during previous volumes, subscribers may expect that the journal for 1871 will be conducted the same as in the past. A first class, live journal has heretofore been issued by the gentlemen named above, and it is proposed to continue issuing a first class, live journal—making use, however, of all the experience that has been acquired in effecting improvement.

We will not make any pledges to our readers to effect this or that for their benefit, only assuring them that they can rely that the fourth volume of the REPERTORY will be fully equal to any of the previous ones, with a strong probability of being better. We hope that all our subscribers of the past year will continue with us; and not only so, but that each one will endeavor to secure one or more additional subscribers. A journal so cheap as the REPERTORY can not be made to pay even its expense, without saying anything about a margin over, without a very large number of paying subscribers. Just consider: there is furnished in a year as large an amount of reading matter for \$1.50 as any medical monthly supplies for \$3, and a third more than very many do. We publish 48 pages monthly; the largest three dollar monthly gives 64 pages; but examine

our different issues, and it will be found that, in consequence of our much smaller type, that while but very few numbers in a year contain less leading matter, very many contain much more.

As an inducement to all to subscribe for the MEDICAL REPERTORY, we will agree to furnish any subscriber with any medical or literary journal published in the United States at a price of three dollars and over for a dollar less than publisher's price. On such terms the REPERTORY need cost but *fifty cents*. Further, any one sending us eight *new* subscribers and twelve dollars, we will send them by express the Household microscope, a compound instrument, magnifying 20, 40, 50, and 100 diameters—400, 1600, 2600, and 10,000 times—cash price, \$5.

LEGISLATIVE VISIT TO THE CINCINNATI HOSPITAL.—REMARKS MADE BY DRS. JUDKINS, DAWSON, AND OTHER EMINENT GENTLEMEN OF THE MEDICAL AND SURGICAL PROFESSION.—We learn from the *Commercial*—for we were not, for obvious reasons, one of the honored invited—that on the 22d ult. several members of the Hamilton County delegation of the Legislature, by invitation of the Board of Commissioners, and the Medical Staff of the Cincinnati Hospital, paid a visit to that institution. The gentlemen present were: Senator Hunt, Representatives Bates, Corcoran, Cunningham, Dodds, Goepper, Hill, Hambleton and Haldeman, accompanied by Senator A. E. Jenner, of Crawford County; Judges Storer, Taft and Hagans, of the Superior Court. Hoeffer, of the Probate Court, and Murdock and Force of the Common Pleas, were also present, beside several members of Council and Board of Aldermen.

The Medical Staff and Commissioners, it is said, took great pleasure in exhibiting everything in the institution to the official visitors, and presented some very useful information for the consideration of the Legislative Committee, several of whom had never been inside of the building before. Unfortunately, however, the

neglects to state whether the most useful information of all was communicated or held back; viz., how the staff has been selected, or rather, how it has not been selected—that no account has been made of a candidate's general scientific attainments, professional acquirements, or reputation in the profession *at large*; but, on the contrary, it has been considered what college ring he belonged to, his availability to be made use of in scheming purposes, etc. Information of this kind is of the highest interest, and should be in the possession of those whose duty it is to enact laws for the government of an eleemosynary institution like the hospital, but we fear that as all mention of it was omitted from the report, the Staff and Board of Commissioners did not communicate it, and that in this respect, and in all others, under the soothing influence of plenty of wine and whisky, the legislative guests were left to presume that everything was lovely and the goose hung high. It may be set down as a rule, to which there is scarcely ever an exception, that when a ring of men, or clique of any kind, wine, whisky and feed legislative bodies, members of city councils, judges of courts, they have some rotten purposes to carry out, or something rascally to conceal, or both. Cramming men with edibles, and inebriating them with liquor, is not appealing to their reason and humanity, but to their bestial appetites, which, unfortunately, with a very large number, govern the conduct. Honorable men, and men of sense, such as we presume our legislators and judges are, require no other means to enlist them in any cause having on its side right and humanity, than a simple presentation of facts; and there is no occasion to run after them with a whisky bottle, unless it is wanted to drown out their higher feelings, and blunt them to appeals of justice. We think, however, that the hospital staff is mistaken in the presumed fleshly weaknesses of their guests of the 22d ult.; and that the latter will be found ready to listen to and to

redress the abuses that exist in the hospital management when stated to them.

It seems that when the Board of Commissioners—generally termed trustees—desire to have statements made which none of the rest of them have the face to make, they have Dr. David Judkins, of their number, to perform the task. When Dr. Bartholow was discharged from the hospital staff for criticising a published lecture of Dr. Comegys, and everybody was familiar with the cause of discharge from the trustees having reported it in advance, we find Dr. Judkins denying it to a newspaper man, and by innuendo giving out that it was for sufficient reasons, not known to the public. At our banquet we find the doctor stating, in a great speech he made, that although the hospital cost more than was originally anticipated, the beneficial results had justified the expenditure. If any one can inform us of any other result of exceeding the originally anticipated expense of building the hospital other than having an immense structure of double the size that will be needed by the city for the next fifty years—more than one half of it lying empty, and thousands of dollars of interest paid yearly on nearly half a million of dollars that was not at all needed—we will pay him a reward. He stated that *it was ready to be proven that the Board were running the cheapest institution of the kind in the United States*, and that *the Cincinnati Hospital had the lowest rate of mortality of any hospital in the country*. To make such announcements as true, when they have again and again been disproved, required a vast amount of brassiness, but "little Dave," as our friend Dr. Murphy styles him, was fully supplied with the metal. After the flowing bowl, which makes glad the heart and steals away the brains, had been passed round, Dr. W. W. Dawson, whose oratorical efforts we have before flatteringly noticed, arose to his feet and looked around. Immediately the hum of voices was hushed. "In his remarks he paid a

high compliment to the individual members of the staff [he is one of them], and, in conclusion, asked if they were not fair representatives of the medical profession.* Fair representatives of the medical profession! A large capacity, then, to eat and drink—to guzzle liquor and stuff oysters—makes a physician entitled to be regarded a fair representative of the medical profession; for at the banquet no other capacity was tested! No learned papers were read, no scientific disquisitions were indulged in that could afford an intelligent person an opportunity to estimate the staff's professional attainments; only the feeding capacity was set up as furnishing the measure of merit for a membership of the staff. Aspirants for the position should make a note of this, and if they have no higher motive than its attainment, they will waste no time in cultivating their heads, but proceed at once to develop their abdomens.

The newspaper report proceeded to state that other members of the staff made speeches, but they are not given. If Drs. Dawson's and Judkins' remarks only were regarded worthy of reporting, and they of the character as represented, how incoherent must have been the others'. The reporters should be thanked for suppressing them.

The articles of fare are stated to have been "oysters, hot and raw, the best of coffee, sliced tongue, oranges, apples, raisins, etc." The reporter says that this little entertainment did not cost the tax-payers anything, but was gotten up by the hospital commissioners, medical staff, etc., at their own expense. We presume that all the tax-payers did not pay for was one or two half cans of oysters brought to the hospital in the coat-tail pockets of one or two of the staff. But this is a matter of very little importance, for the tax-payers are so used to being swindled by entertainments of the kind, that they will not care whether they paid

for this one or not. A matter of far more concern is the commencement, inaugurated by this entertainment, of making use of the often employed debauched means to retain men in positions for which they are not fitted, and to keep worthy men out. It has been rumored for some time in the city that an effort would be made in the Legislature this winter to have the law in regard to the hospital so changed as to secure the best medical talent the city afforded on the staff; in other words, to have the positions filled by the *concour* plan; or, if not by that plan, by some other that will place the colleges on a more equal footing with respect to the hospital. Such a movement, of course, would look to the interests, not only of the medical schools, which are public interests and should be fostered by every citizen, but to the welfare of the hospital as a humane institution. The present staff, a majority of whom would lose their positions in consequence, fearing that measures of the kind were in contemplation, and would be successful if not resisted, have set to work to oppose whatever might be on foot for the public good, for, of course, it would not be in accord with *their* interests, and as they have no arguments to bring forward in their favor, they rely upon the whisky bottle, the demijohn, and such like means to overcome their opponents. The lawmakers are to be feasted, toasted and made drunk, if possible—their minds closed to facts and reason, and their bestial appetites worked upon, so they may view with indifference any grade of rottenness.

Well, it is a sad, wicked world, but we have the consolation in knowing that justice will eventually overtake the wicked. It is only a matter of time.

THE OHIO STATE MEDICAL SOCIETY will hold its next annual meeting in Cincinnati, April 4, 1871.

At the meeting in Cleveland for 1870, the Executive Committee was authorized to determine the time of the meeting for 1871, to accom-

* The above is a correct extract from the Cincinnati COMMERCIAL of December 23rd.

moderate the time of meeting of the Kentucky State Medical Society, which convenes at Covington; and as the Kentucky Society had already adjourned to meet Tuesday, April 4th, the committee of the Ohio Society has decided to accept that time.

As the two State Societies will thus meet simultaneously at points so convenient for mutual intermingling, it is hoped and believed that the meetings for 1871 will prove the most interesting that have ever been held.

Further arrangements will be duly announced.

EDWARD B. STEVENS,	} Ex. Com.
W. W. DAWSON,	
P. S. CONNER,	
W. B. DAVIS,	
A. J. MILES,	
G. A. DOHERTY,	

CINCINNATI COLLEGE OF MEDICINE AND SURGERY.—This college commences its Spring and Summer Term of Lectures, March 3d. At the close of the term the degree of M. D. will be conferred on all candidates for graduation who have fulfilled the requirements, and passed a satisfactory examination. The attendance upon the present course of Lectures has suffered no diminution, notwithstanding the other schools have lowered their fees \$20, while it continues them the same.

LONGVIEW LUNATIC ASYLUM.—Leaving out some of the quacks, the Trustees have appointed Superintendent, in place of Dr. Langdon resigned, the most incompetent physician of all those who were candidates for the position—Dr. Wm. H. McReynolds. The gentleman is a very young physician, with few acquirements of any kind. His appointment we regard as a very great wrong on science and humanity, to which the Trustees seem to be quite indifferent.

MEDICAL BULLETIN.—Circumstances of a private nature have compelled the editor of this very able journal, Dr. E. Warren, to

combine it with the *Baltimore Medical Journal*.

JEFFERSONIAN DEMOCRAT.—This is the title of a weekly paper recently commenced at Louisville, Ky., and edited by our old friend, W. H. Munnell. As its name indicates, it is an exponent of Jeffersonian democracy as expressed in the Kentucky resolutions of '98, and should receive the support of all those who believe that those resolutions embody true democratic principles.

Mr. Munnell has had experience as an editor, having edited the *Hillsboro Gazette* of this State, and afterwards, in conjunction with the Hon. W. M. Corry, the *West and South*, now the *Commoner*, of this city. We wish him success in his new enterprise, and hope our Kentucky friends will give him their support.

Published by J. H. Turner at \$3 a-year.

HEARTH AND HOME.—Is a first class family newspaper with which, we presume, most of our readers know all about, or ought to, for they should all be subscribers to it. Each number has sixteen quarto pages, and has many elegant illustrations. It is very much devoted to rural matters—the farm, garden, stock, etc.—besides containing much valuable reading by the best writers in general literature. \$3 a-year. Published by Orange Judd & Co. New York.

THE LITTLE CORPORAL.—The number for January is received. It is small praise to say that this magazine is unexcelled for children, and even older ones. The new serial begun in this number opens admirably. The illustrations are good. \$1.50 a-year. Address Sewell & Miller, Chicago.

OLIVER OPTIC'S MAGAZINE comes to us monthly filled with good things for boys and girls. Many of our best writers write for this periodical, and we can unhesitatingly recommend it. \$2.50 a-year. Published by Lee & Shephard, Boston.

THE CINCINNATI MEDICAL REPERTORY.

VOL. IV.

CINCINNATI, FEBRUARY, 1871.

No. 2

OINOLOGY.--A SCIENTIFIC SUBJECT POPULARIZED.

**Effects of Oinopetic* Dissipation in Cold and Warm Weather Explained
via a Series of Illustrations through the Unerring Lever-power of
Science.**

By S. E. MCKINLEY, A. M., M. D., Chicago, Illinois.

The chief processes of organic life consist in nutrition, or the building up of the body with such articles of food as the Great Author of our being has so plentifully provided, and oxidation, or the separation from the tissues of infinitely small and also infinitely numerous particles which pass away, to use an inelegant word, as offal. This is effected by the free oxygen taken into the body through the lungs in the vital act of inspiration; it not only plays the part of a vitalizer to the blood, from which all the nutrient particles are selected to build up, but as a destroyer also of particles already formed into tissue. This is called retrograde or destructive metamorphosis, as the *débris* or offal, once so highly organized, is now lowered or degraded in organization, and is returning to the earth from whence we all originally sprang, and to which we will all again return, through the destroying influence of the oxygen, which before contributed so greatly to a vitality and organization it has now lost.

The conversion of aliments into tissue is called constructive metamorphosis, but more scientifically speaking it is dynamical metamorphosis, as it is a process which develops a higher from a lower organization. The reduction of tissue to lower grades, is called destructive. It is therefore adynamical metamorphosis, as it reduces a higher to a lower organization, and thus back to

* From the Greek *oinos*, wine, and the latinized Greek word *oro*, to drink.

the inorganic "dust" to which we are all destined. From the results, however, of this adynamical process to the tissues, dynamic force is imparted to the nerves, the conveyers of force to the muscles, where it is expended.

Any agent deteriorating our health, whether it be telluric, miasmatic, or thermal, sudden transition of temperature, intemperate eating of wholesome, or the imprudent use of bad food, intemperate drinking of good or moderate use of bad liquors, does so by destroying the correlative harmony of these two vital processes, nutrition and oxidation. Any agent, on the contrary, contributing to a return to health, let the agent proceed from whatever sources, does so by reproducing the correlative harmony, lost in disease, of those two vital processes, nutrition and oxidation.

Disease is not an entity—a certain indefinite something requiring eviction from its locality by therapeutic agents directly antagonistic to it. Disease is the disadjusted reciprocal relation of nutrition and oxidation. To restore health is to restore this reciprocal relation, the loss of which is disease.

When the oxidizing process is proceeding too rapidly, molecular expenditure is excessive, and consequently exhaustive. To limit the latter is to retard the former.

When the oxidizing process is below the normal standard, is retarded, molecular expenditure is diminished. To increase the latter is to accelerate the former.

When constructive metamorphosis, or molecular aggregation, is proceeding normally, destructive metamorphosis, or molecular segregation, is proceeding in correlative harmony with it. This constitutes the reciprocal relation of these two vital processes—nutrition and oxidation. This is health, as nutrition is complete.

When constructive metamorphosis, or molecular aggregation, is proceeding inadequately, destructive metamorphosis, or molecular segregation, must necessarily be out of harmony with it. This constitutes the disadjusted reciprocal relation of these two vital processes, nutrition and oxidation. This is disease, as nutrition is incomplete.

Therapeutic agents of whatever class, either from the organic or inorganic kingdoms, whether in fluids or in solid states, cure only, however, as they influence these two vital processes by

becoming intermediary to limit molecular expenditure, or to extend it and to conserve nutrition. But this, it is not the writer's purpose further now to discuss, but he will confine himself here to alcoholics only, and trace their peculiar influences over the human body; and will refer the reader, who may desire to extend his inquiries in this direction, to the writings of Dr. Z. C. McElroy, of Zanesville, Ohio, to be found in the June number of *Medical Archives* of St. Louis. The article alluded to illustrates most forcibly of itself the distinguishing capabilities of this gentleman; and when to it is superadded his other contribution—"The dynamics, principles and philosophy of organic life," as embodied in the *Medical Reporter* for December, 1868, of St. Louis, he is at once recognized in the front rank of that grand galaxy of men now living of the profession, whose lives are devoted to its cultivation, elevation, and adornment.

Thus prefacing our illustrations of the effects of alcoholics in cold and warm weather, they will now follow.

Two men of equal age, size, temperament and condition, similarly clad, set out to cross "the twenty mile prairie" on a cold day in an open carriage. A drinks whisky, B drinks none. They eat a hearty breakfast. A takes whisky before and an equal or larger quantity after eating. They set out. For the first two hours B suffers from cold feet and is otherwise chilly. A suffers from neither. During the third hour B becomes warmed up, while A now suffers from cold feet and is otherwise chilly. On reaching the end of their journey, at the expiration of four hours, B is comfortable, while A seems chilled from periphery to center. Explanation—Oxidation, the source of heat, was, as is ever the case, impeded somewhat during the first two hours when gastric digestion was proceeding, and in proportion as this was completed, and the second process of digestion commenced, oxidation was, as is ever the case, more rapid, and reached the zenith of its career as they approached the end of the journey. Thus B is disposed of.

During the first two hours, when gastric digestion was proceeding, and oxidation consequently somewhat impeded, and A comfortable, the whisky previously drank and that consumed on the way diminished sensibility to cold by lessening the oxidizing process in the nerve centers, and as the effects of the liquor passed away, sensibility returned, and the cold was perceptible,

while diminished oxidation throughout prevented the generation of heat to impart warmth. Thus A is disposed of, and is finally dismissed with the assurance that he was the colder of the twain from beginning to end.

Under the influence of repeated drams of whisky, which interrupts the regularity and destroys his capacity for linear motion, a man enters a house by the roadside to warm himself. Seated by the fire, or stove, in a warm room he becomes faint and asks for water, which restores him. Continuing by the fire, in the lapse of a quarter or a half an hour, he is again faint and feels nausea also. To avoid the indelicate scene which vomiting occasions he pursues his journey, but is no sooner in the cold than both faintness and nausea cease. Explanation—The whisky, before his entering the house, had diminished the oxidizing process beyond the power of the exercise in walking, to overcome which otherwise would have kept him warm, and on approaching the fire he is faint and sick because oxidation is still further diminished by the heated atmosphere he now inhales, and the phenomena of vomiting is set forward, but arrested on his return to the road he had quitted to warm himself.

“Exercise and cold atmosphere increase the oxygenating power of the lungs.”—*John Hughes Bennett, Chemical Lectures* page 856.

The water overcame the faintness while its influence lasted, and it did this in virtue of its influence in support of oxidation.

Two men set out to cross “the twenty mile prairie” on a warm day, in an open carriage. They are equal in all respects, save that A drinks whisky while B does not. Both partake of a full breakfast. A prefaces the meal with a good dash of whisky, and supplements it with as much more. They set out. For the first two hours B suffers from heat, is oppressed, feels suffocated, while A does not, but on the contrary is comfortable. During the third hour B cools off, while A in his turn suffers from heat, oppression and suffocation. On reaching their destination at the expiration of four hours, B is comfortable, while A is almost overcome, and hies to replenish a flask long since emptied.

EXPLANATION.—Pending the first two hours oxidation was impeded to some extent, as during gastric digestion is ever the case, especially when the meal is a full one, from the distended

stomach interrupting the full expansion of the lungs, and as the second process of digestion advances, in like proportion did oxidation, which reached the maximum point as they reached the end of their journey, when perspiration was liberating the temperature engendered by this process. Perspiration became free as oxidation proceeded, and the heat created by the latter was liberated by the former. Thus we dispose of B. During the first two hours, gastric digestion impeded the oxidizing process, and this was still further obstructed by the high temperature of the weather. To these two obstructions A should have been indebted for much suffering, like B, but from his own superaddition of a third impediment, the whisky, he escapes at first, through diminished sensibility, from what in the end prostrated him, unliberated combustion. Thus we dispose of A, and finally dismiss him with the irrevocable assurance that he was the hotter of the twain from the beginning to the end.

A traveler on foot reaches a wayside tavern, well charged with whisky, his gait unsteady and tottering, with flushed and heated face and dry skin. He calls for more whisky, gets it, pays for it, drinks it. The weather is intensely warm and he no less drunk. He seats himself in a place from where the sun is excluded, and where there is a draft of air. He takes draught after draught of cold water, perspires copiously, and the more he perspires the greater the demand for water, which he consumes in extraordinary quantities. In the course of an hour, he sets forward on his journey, sobered.

EXPLANATION.—The cool draught of air increased the process of oxidation which the hot weather, while on the highway, had impeded, and the whisky he had previously drank still further diminished, while his capacity for exercise to overcome it was cut off. The frequent draughts of water added to the influence of the cool air, set forward the oxidizing process which liberated the heat within through perspiration, and eliminated also the liquor previously, as well as that which he had more recently drank. The latter took no effect, as the eliminating process induced by a more vigorous oxidation prevented it.

A group of men, twenty-six in number, some years ago traveling over a western plain on a track but dimly visible by day, lost their direction when overtaken by darkness. The weather, very cold during the afternoon, became more so as night advanced.

Though well provided with food, clothing, and an abundance of whisky, they had no wood or other fuel to make a fire. The occurrences of the night will now be given in the language of the writer's informant who was one of the group, and the only physician among them. He was a man of good, strong, hard sense, with quite creditable medical attainments considering the limited opportunities he had for securing them, which consisted in reading the domestic practice of Gunn, Ewell, and Thomas. He knew no more than what these books could convey, but to his credit be it spoken, he knew all they could impart. He had only heard of but had never seen a medical college.

"As we can't get wood, boys, we must keep warm, or at least alive through the powers of *madam vis medicatrix naturæ*. She is all right in any weather if we don't clogg her up and pucker her forces. If I have got any medical knowledge at all, I am going to use it to-night, said I, and the first thing I tell you, to begin with, is this: I am as fond of whisky as any man dare be, but by the gods, the man that gets drunk to-night to keep warm, won't see daylight. When the great God of the universe made man the boss workman of the earth, he made all other things first and the elements too, not to rule over him and to kill him but to *hunker* down to his wants, but boys, whisky was *scored* out of that bill of fare. The *vis medicatrix naturæ* is the highest of all other things, and if she ain't *splintered* up by our own d—n folly, she will ride safe through any storm. We have got to keep stirring round or huddle up in the straw in the wagons, as many of us as can cram in together. Each one will keep the other warm. We must all eat as much as possible, but whisky ain't the thing. Gunn, Ewell and Thomas were three of the greatest men that ever sucked the breast of Esculapius, and their books in that wagon there will back me in everything I tell you. This is what I told them all, but very few minded me. I didn't taste a drop, nor did Carter or Finley; we three huddled in together on the straw in the bottom of our wagon. We took off our boots and overcoats and then got on the straw and put our blankets over us and our overcoats on top of them. We was only cold but did not suffer nor freeze. Clark, Reilly and Tanner was very cold, and we heard them yelling nearly all night. They suffered very much but was not frozen, they drank very little whisky, but they took several *thin drinks* in the run

of the night. Seven other fellows that drank a good deal had their toes and fingers scorched, but they got over it in a few weeks. Six of the boys, that drank pretty strong, was badly froze and never got over it; and four that got very *boozy*, was froze so bad that they died three or four weeks afterwards. But Hutchison, McElroy and McAlpine was stiff dead by daylight: they got dead drunk, and as they did not make a fuss the other boys thought the whisky was keeping out the cold, so they drank the stronger. I tellyou, sir, they all suffered just *accordin'* as they took in the whisky; them that got drunk, froze dead; and them that drank less, but too much, died after awhile; and them that drank only *moderately*, will feel it as long as they live; and them that took only *thin drinks* were well nigh *shut up*. Clark, Reily and Tanner only drank *light like*, and they felt frost just *accordin'*. We three didn't drink any. The *vis medicatrix naturæ* brought us through. She is always true to her principles."

These men were all Americans, Dr. Stuthard, my informant, stated. Their ages ranged from twenty-three (McAlpine), the youngest, up to forty-one (Carter), the oldest of the group. Finley was thirty-five, the doctor thirty-eight, Clark thirty-one, Reily thirty-four, Tanner thirty-six, Hutchison thirty-seven, McElroy thirty-nine. All were equally well provided, each having two blankets. All were in the bloom of life, in the best of health, and ready to encounter and able to overcome the hardships inseparable from a frontier life. None were of an age too great to resist the cold, as the oldest of them suffered none; nor were any too young to resist it from this cause.

Finley, Stuthard and Carter—these three drank no whisky, slept on straw and under their blankets with their overcoats "on top" of them. Neither were frozen, nor did either of them suffer, but were simply cold.

Clark, Reily and Tanner drank but little, and were equally provided with blankets: "they *yelled* from cold," but were not frozen.

Seven others, temporarily injured from frost bite, "drank a good deal," and suffered very much.

Six who drank "pretty strong," never wholly recovered.

Four who "got very *boozy*" were frozen so badly as to survive it but three or four weeks.

Three others, Hutchison, McElroy and McAlpine, who drank to the state of insensibility, were frozen to death.

Between healthy but wild and uncultivated minds with good common sense, and those of pre-eminent culture, there is a strong vein of resemblance. Each avoids ceremony and the irrelevant. The first, because his mind invests *fact* only, and he expresses it in simplest terms. The second, because the ceremony which leads to the *fact* is unnecessary, and he avoids it. In the quotation of Dr. Stuthard's statement, short, blunt, and to the point, we perceive the full fact, and the fact is that whisky not only does not enable us to withstand, but diminishes our capacity to endure cold, and by lessening sensibility endangers life from it. Stuthard's remarks will bear reading a thousand times and lose no gloss from it, but will appear more rich and significant at each repetition. He gave the most rare and wholesome instructions to his comrades it was possible to offer; and had they been followed none would have been frozen, certainly none would have died.

There is nothing left to be added. Dr. Stuthard's "talk" covers the whole. The whisky consumed, contracted or abridged, or, in the significant language of the doctor, "puckered up the forces."

Those who suffered none where wholly indebted to their abstinence from whisky for this immunity. While those who did suffer, in whatever degree, owed it to the whisky, the source of it all, and the cause of the three immediate and four subsequent deaths. Those who drank but sparingly, while they "yelled" from cold, had at least drank sufficient to *lessen* the process of oxidation, but not enough to deaden sensibility. The quiet *trio* who made "no fuss," were insensible to the cold which sealed them in death. Lured by this silence into the belief that it arose from the comforting effects lent by the whisky, others drank, but not so deeply, and suffered in proportion to the quantity consumed. They were told that while out of the reach of fuel, they must rely upon the resources of the vital organism for safety; that if left unobstructed by imprudence, *her forces* would be adequate to the emergency; that limited as his attainments might be, the occasion should develop them all for their common good; that while he was himself no exception to other men as regarded a fondness for whisky, he would not lend the force of his example to others whose lives would be endangered by following it; that the AUTHOR of all had created all things to subserve the

wants of man, his chief workmanship, and would not give the lie to his munificence by interposing embarrassments to this end; that whisky was not included in the vast table of supply; that the forces of organic life were superior to and above surrounding influences, and if not *shattered* by their own opprobrious delinquencies, would ride the storm in safety; that exercise was necessary, or that each should lend warmth to the other on the only bed they could secure by lying closely together; that eating plentifully was necessary also, but that whisky could form no part of this desirable expedient; and, finally, the more effectually to urge the measures he proposed for their collective and individual protection, appealed to the books he had with him as evidences of the wisdom of their authors, who had drank deeply at the fountain head, and who were the sources of his own acquirements.

This was eloquence, because truth and earnestness were combined in the midnight peroration, as he stood bareheaded in the deep, dark, stormy waste, when he delivered it to his less prudent companions.

TREATMENT OF ACUTE RHEUMATISM.

By DR. J. T. DAVIS, Laconia, Indiana.

The treatment of rheumatism like the treatment of pneumonia remains a *questio vexata*. Warren once said that six weeks in bed was the best remedy. In more modern times it is asserted that cases of rheumatism treated with mint water alone will get well equally as soon as those treated by more active means. Prof. Bennett of Edinburgh believes that acute rheumatism cures itself. Now Prof. Bennett is a great man, and a high authority in the medical profession, but then great as he is, we believe that he has taught a *very great error*. We cannot conceive how nature can one moment cause disease, and the next cure it. We sincerely believe that so much talking and writing about "effects of nature," has been, and is yet detrimental to the welfare and progress of medical science. We are no advocate of old foggy ideas in medicine, *but we do believe and boldly assert that drugs will cure diseases if given understandingly*. Rheumatism is a fever, hence, when called to see a patient suffering with it, we go to work without delay and endeavor to subdue it as speedily as possible,

just as we would in any other febrile affection of a periodical character, for rheumatic fever, and fever and ague, certainly have some points of resemblance; and here in the west near our great rivers, rheumatism seems to wear a good deal of the livery of malaria. Hence, in its successful treatment, quinia sulph., or cinchonia sulph. is the basis of the treatment; other remedies are combined with it, and other means resorted to, to relieve the patient, but this remedy has as much or more to do in relieving the patient, and aiding in the restoration of his vital powers, as any other. When called to a patient with rheumatism, we first order him to be put to bed between blankets, and if he is suffering very much we give him one or two grains of opium, and proceed to administer the following alternately every three hours.

R Quiniae Sulph. gr. xx.
Potassæ Nit. ʒi

M. Ft. chta. No. vi. Sig. One powder every 3 hours.

R Tr. Aconit.
Tr. Colchicl. aa f. ʒi.
Potassa Bicarb. ʒiiss.
Aqua, ʒvj.

M. Sig. One tablespoonful every 3 hours.

In a large number of cases we have found the above treatment to be excellent. Plenty of milk and good nourishing food is given. We never expect to cure a patient by starving him. In this disease as in many others there is a great waste going on, and it behooves us to husband the patient's resources as much as possible. When there is any vomiting or nausea we find lime water and milk to answer a fine purpose. If the heart becomes implicated, apply a blister, and increase the dose of aconite. Treated thus, all our cases of heart troubles have been speedily removed. Liniments to the inflamed joints are sometimes useful, but we do not use them in all cases.

The bowels should be kept open, but purging is not required. The patient must be kept clean. All his clothing and bed clothes should be changed frequently. If he cannot rest at night give opium and morphia. As stated above, we have found the above plan of treating rheumatism to be excellent. The worst symptoms generally subsiding in a week or ten days, sometimes earlier. As soon as the height of the attack has passed over, we give

him quinia and iron, and continue it until he is entirely well. If the patient is scrofulous, give him potassa iodide. If nervous, administer the nerve tonics, and give the best of nourishing diet.

In concluding this imperfect account of the treatment of acute rheumatism, I quote, and heartily indorse the following language of Dr. Henry Kennedy of Dublin: "To sum up then, I hold that acute rheumatic fever can, by our art, be materially shortened in its duration, and that those who are sick need a physician."

THE "LAWLER CASE" AND C. G. COMEGYS, M. D.

BY ROBERTS BARTHOLOW, M. D.

The Cincinnati Medical Turveydrop—C. G. Comegys M. D.—appears in the *Lancet and Observer* for December, as a critic of my report on the case of the late Davis B. Lawler of this city. In a matter of "deportment" I grant that his opinions are eminently sound, but when he tries his hand at a medical discussion, he betrays a pitiable degree of ignorance which no amount of puffing, and swelling, and posturing, can conceal. He proves as unequal to the comprehension of the Lawler case, as he was to the subject of brain tumors. He is not unequal, however, to a vast degree of misrepresentation. He mistakes the Lawler case to suit his purpose, as he falsified the hospital records in order to confirm his diagnosis in a case of brain tumor. Before proceeding, therefore, to point out the numerous errors into which he has fallen in his conceptions of the Lawler case, it is desirable to present my report of that case again, to answer by a reproduction of the original text his falsifications of my statements.

Case of Davis B. Lawler.—Amnesia of written language; vertigo; unequal pupils; intermittent and irregular pulse; death; autopsy.

The case of the late Davis B. Lawler is, in some respects, so remarkable that an account of it cannot fail to interest the medical profession. He had, for many years, an intermittent and irregular pulse. During the last two years of his life he presented an example of that peculiar mental defect—*amnesia of written language*.

A *post mortem* examination enabled me to verify the existence of lesions which I have diagnosed during life.

Not to weary the reader with prolix details I refrain from nar-

rating the almost daily observations made during the fifteen months of my attendance. It will suffice to embrace all the facts under the following heads :

Objective symptoms.

Subjective symptoms.

Autopsy.

Objective Symptoms.—Mr. Lawler presents the usual characteristics of advanced age. He is now in his eighty-second year.

Pupils of unequal size, the left being dilated and motionless. The reflex and accommodative movements of right eye are normal. With the aid of glasses he has no difficulty with near objects; remote objects he distinguishes as readily as is usual at this period in life. An *arcus senilis* exists in both corneæ. A commencing opacity is detected in the left crystalline lens.

The pulse is exceedingly irregular. It is intermittent, but the interruptions of the pulse-beat are not uniform; a full pulsation is followed by a variable number—from two to five—of very small and quick pulsations, each of which varies from the others in duration and force, and then a pause occurs. The peculiar quality of his pulse is shown in the subjoined sphygmographic trace taken by the sphygmograph of Marey. I made the observation when he was in the erect posture and at a time when he was comparatively free from cerebral disturbance.



It will be perceived, on examination of this tracing, that the *ascent* of the wave is broken, the *summits* irregular, and the *descent* unmarked by the normal dicrotic movement. The first wave—on the left hand—is followed by two smaller waves, and an intermission in the beat, and the second by three small waves each differing from the others in amplitude. In order to exhibit the wide departure of this tracing from the normal I append a trace taken from the pulse of Dr. B. C. Ludlow, of this city.



The physical signs are in accord with the sphygmographic trace. A loud double bellows murmur is audible at the base of the heart, and thence propagated in both directions. I therefore diagnose obstruction and regurgitation at the aortic orifice with also mitral insufficiency. The evidences of calcareous degeneration, as furnished by the state of the radial arteries and the

arcus senilis, indicate that similar changes have taken place in the cardiac valves on the left side. As the irregularity of the pulse has been observed, according to Mr. Lawler, for more than twenty years, it does not appear what relation exists between the changes in the valves and the altered rhythm of the heart's movements. It is probable, however, that calcareous degeneration has preceded the irregularity of the pulsations.

The vegetative functions are well performed for this period of life, the nutrition of the body being maintained at a uniform level. He had, however, during my attendance, several severe and alarming attacks of gastro-intestinal disorder. After recovery from these his nutritive forces soon repaired the waste.

The functions of animal life are less energetically performed. His walk is tremulous and ill-assured. In consequence of a cerebral disorder, to be presently described, he had often much difficulty in maintaining the vertical station, and he had several severe falls, producing serious concussion of the brain. One of these accidents occurred in September, 1867, and was followed by alarming symptoms. He had complete use of his tongue, and articulation, until within a few weeks of his death, was not impaired. His vocabulary was extensive and rich, especially in unusual words, but names of persons, places and dates frequently escaped him.

Subjective Symptoms.—The most frequent subject of complaint with Mr. Lawler was vertigo. At all times he experienced more or less, but frequently the attacks were so severe as to incapacitate him for any physical or intellectual exertion. When he arose from the bed, or attempted to exercise his mind deeply on any topic, the vertigo came on accompanied by nausea. During these attacks his eyes were suffused, his face congested, and the veins of the forehead swelled.

The vertigo seemed to me to be due to, 1st. the irregular supply of blood to the brain in consequence of the obstruction and regurgitation at the aortic orifice; and, 2d, to a structural alteration of some part of the left hemisphere of the brain, as evidenced by the dilatation and immobility of the left pupil.

For about forty years Mr. Lawler had suffered from a neuralgic affection, involving the cutaneous nerves, chiefly of the inferior extremities, but sometimes also of the trunk. He described the sensation as a sudden, sharp pain shooting along the limb like an electric shock. In only one instance had decided alterations of nutrition followed the pain in a spot, but the skin of the legs was rather smooth and shining, indicative of partial nutritive changes. The pains were frequent but not constant, coming on usually about 11 A. M. and increasing in intensity toward evening, and subsiding during the night. Although he had consulted physicians in various countries he had not found relief. A wet bandage which he was in the habit of applying, assuaged

the pain somewhat. As Mr. Lawler inherited a strong predisposition to gout it is probable that this neuralgia was gouty in character and origin.

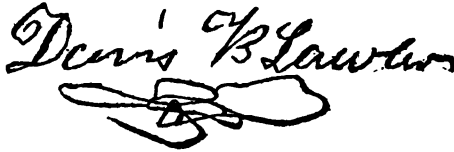
The most interesting feature of the case was the *amnesia of written language*. Mr. Lawler had lost the power to recognize the characters by which we express ideas. This mental defect, as I was informed by Mrs. Lawler, had existed from September, 1867, when Mr. Lawler, in falling, had suffered a severe concussion of the brain.

Since some of my readers may not be familiar with this peculiar condition of the mental faculties, it may be proper to enter somewhat more into details. Under the term *aphasia*—a word proposed by Trousseau—is included loss of the faculty of articulate, written and sign language. A man suffering under this disease, although in a mental condition to think—to have ideas—and to appreciate the conditions surrounding him, is unable to communicate his ideas to others. In other words, his memory for the signs by which we communicate ideas, is obliterated. Now this condition, when it includes all the modes of expression, is denominated *aphasia*. But it may exist in a partial degree. Thus a man may have lost his memory for words, and yet be able to communicate his ideas by signs; or, he may retain his memory for words, and lose his memory for the written and printed characters, in which words are expressed. This latter constitutes *amnesia of written language*; the term *amnesia* meaning, of course, the loss of memory.

This mental defect—aphasia or amnesia—has been most commonly associated with disease on the left side of the brain. Gall, as is well known, had located the faculty of language in the anterior lobes of the brain. Drs. Dax, father and son, governed by pathological experience, had, curiously enough, fixed the position of this faculty in the left anterior lobe; and Dr. Paul Broca, also influenced by pathological observations, restricted its limits to the third left frontal convolution and the island of Reil. Aphasias is most commonly associated with right hemiplegia. In the experience of Dr. Hughlings Jackson, of London, this relation always exists. That the brain, a symmetrical organ, should have so important a faculty as the memory for the words and characters by which we express ideas, situated upon one side only, is a curious circumstance, but not without analogies in other faculties. Mr. Moxon, in the *British and Foreign Medico-Chirurgical Review* for April, 1866, explains this departure from the law of bilateral symmetry in the organs of relation thus: "One side of the brain operates immediately: the other consensually in all symmetrical movements."

Mr. Lawler presented an example of that limited degree of aphasia—loss of the faculty of written or printed language. That it depended upon disease in some portion of the left hemisphere

was indicated by the dilatation and immobility of the left pupil. The autopsy revealed the seat and character of the lesion. Mr. Lawler could see the written or printed characters, but they conveyed no information to his mind. So great was his distress at being unable to read that I suggested to Mrs. Lawler that an effort be made to teach him the characters anew, and for a time he laborously studied a child's primer with this object. What is still more singular, he could perform the automatic act of writing correctly enough. He was in the habit of writing directions upon his slate in regard of business transactions, but he was unable subsequently to read the writing. He could, indeed, immediately after writing, and while the subject matter was fresh in his mind, tell what he had written, but he could not read the characters. This peculiarity may be illustrated by an occurrence which happened under my own observation. One day as I sat by his bed a check was brought to him to be endorsed. He put on his spectacles and wrote his name on the check in his usual manner. Handing it to me he said, "Doctor, is that my signature? I see that I have written something, but I can not read it." I am able to give below a *fac simile* of this signature:



It was a great grief to Mr. Lawler to be thus bereft of so important a faculty. He constantly bemoaned his unfortunate mental condition, and looked forward with gloomy forebodings to the complete loss of his intellectual powers. He possessed by nature superior mental gifts, and they were enriched by travel, by reading and by reflection. The comparison of his present enfeebled mental state with his former intellectual activity greatly embittered his last days.

Autopsy.—I omit all details not necessary to explain the symptoms during life. Besides the general condition due to age, the changes of structure found were in the circulatory system and in the brain. Most extensive calcareous degeneration existed throughout the arterial system. The aorta was hard, brittle, and chalky in color, and large calcareous plates could be detached from its serous lining. The semilunar valves of the aorta were extensively calcified, and the aortic orifice so narrowed that the little finger could be just pushed through. The *chordæ tendinæ* of the mitral valve had also undergone calcareous degeneration, and portions of the valves likewise. The walls of the left ventricle were somewhat hypertrophied.

The basilar artery, the arteries of the circle of Willis the mid-

dle and anterior cerebrals, were thick, hard, white, and chalky. The basilar artery was of the size of a goose quill. All of these arteries had varicose dilatations, a condition of things which extended to the smaller arteries of the brain, so far as I examined them.

There was a small amount of serum in the arachnoid spaces. The convolutions of the brain were remarkable for their depth and complexity. No alteration could be found in the third convolution of the left side, in the island of Reil or the neighboring parts, except the same alterations in the arteries which existed throughout the brain. Section of the hemispheres disclosed no lesions of the central white matter, or of the cortical periphery. The right lateral ventricle contained a small amount of clear serum. The left was distended with fluid, its posterior cornu being much enlarged, occupying most of the posterior lobe, which was hollowed out to contain the fluid. A very thin stratum of cerebral matter, consequently, was interposed between the tentorium and this cavity. The ependyma of the enlarged left ventricle was opaque and thickened. Attached to the left choroid plexus, and firmly wedged against it in its descent through the middle cornu of the ventricle, was a globular calcareous mass, a half-inch in its longitudinal diameter. This calcareous mass, by compression of the vessels of the choroid plexus, interrupted the return of blood from this part of the brain, thus causing the effusion above described. As a part of the choroid plexus was dragged down, the anterior portion being kept tense, it is rendered evident that at some previous time the calcareous mass had occupied a different position. The history of the case indicates that the mass was dislodged, and falling down into the middle cornu compressed the choroid plexus at the time when Mr. Lawler suffered the severe fall and concussion of the brain, which was followed by amnesia of written language. I do not claim for this opinion anything more than that it is a plausible conjecture.

The reader will doubtless observe that this case is an exception to the mass of observations which have been reported locating the lesion of aphasia in the third left frontal convolution and the island of Reil. It is certainly true that other exceptional cases have been reported; but the rule is, nevertheless, that amnesia of spoken or written language is associated with lesion of the left hemisphere of the brain. Few cases have been reported in which aphasia depended on lesion of the *right* side of the brain. Mr. Lawler's case then conforms to the general rule; but it demonstrates, so far as one case can, that the posterior lobe of the brain takes part in the important intellectual operations of speech and of written language.

The reader who will take the trouble to compare the above

report of the Lawler case with Dr. Comegy's criticism on it, will hardly need to hear further from me on the subject. He will perceive that Dr. Comegys, influenced by his inveterate habit of "generalization," does not scruple to make a Lawler case very different from that which I have reported. He frequently accuses me of "case-making;" like all criminals, he constantly suspects others of his own crimes. He forgets, does this medical Turveydrop, how he stands convicted in print of case-making. Let the reader refer to the Cincinnati *Lancet and Observer* for December, 1868, p. 733: he will there find reported a case entitled, "Typhoid Fever connected with Organic Disease of the Kidneys—medical clinic of C. G. Comegys, M. D."

This patient, on whose case Dr. Comegys delivered a set clinico-didactic lecture on typhoid fever, died, and was examined in the presence of the hospital class. This patient had been treated in the surgical ward for stricture of the urethra, and was transferred to the medical ward, where Dr. Comegys diagnosed "Typhoid Fever," and, as mentioned above, committed himself formally to this opinion in a public lecture. The following is the official account of the autopsy:

"*Autopsy*, sixteen hours after death, by Dr. Bartholow, Pathologist of hospital. Lungs and heart were found normal. Liver and spleen considerably enlarged, and their structure somewhat softer than natural. The intestines contained but little gas. Peyer's patches were simply congested, no evidence of inflammation or ulceration as having occurred during the patient's illness. The penis and bladder were removed entire. The penis was phymosed. A stricture was discovered anterior to the triangular ligament, the fibrous bands encircling the whole of the canal, diminishing its calibre to such an extent that it barely admitted the end of a small probe. The bladder was contracted and very much thickened. The ureters were dilated, long and tortuous. The right kidney and pelvis were found converted into a large sac, measuring seven and a half inches long and nine and a quarter inches broad; surface of sac was smooth, and when opened it was found to contain six or eight ounces of fluid resembling pus. The renal structure was almost completely destroyed. The left kidney was not so large, nor the destruction of tissue so extensive. Its external surface was granular, presenting, here and there, points of fluctuation; on cutting open the organ it was found extensively sacculated and full of pus. The mucous membrane of the pelvis was much thickened. Right kidney weighed xvj oz., the left xivss oz."

Notwithstanding the autopsy thus positively disproved the diagnosis, we find this "model of deportment," who desires to be considered also a model of veracity, rushes into print with a report entitled, "Typhoid Fever connected with Organic Disease of the Kidneys."!! Can we longer wonder that he suspects every one of these shameful practices?

In commenting on the Lawler case Dr. Comegys finds fault with my statement that Mr. Lawler had "amnesia of written and printed language;" and in doing so he exhibits his usual ignorance of these topics. My paper conclusively shows that Mr. Lawler had the vision usual to his age: that he could see distinctly, and that his defect was not one of vision merely. A man perfect as to his eyes and brain, but not educated in the meaning of the characters, will see distinctly the Chinese, Hebrew or Greek writing, but it will convey no information to his mind. The disease of Mr. Lawler's brain had destroyed his memory of the meaning of the English written and printed characters, but had not affected his ability to see them. Dr. Comegys has not forgotten these distinctions (amnesia); he appears never to have acquired them (original defect).

So difficult does our medical Turveydrop find a criticism of the Lawler case as it is, that he makes much of a misprint of "right" for "left" hemisphere. I accurately fixed the lesion in the left hemisphere, as it is correctly stated elsewhere in my report, and as the autopsy proved. The primary lesion of the brain consisted in a calcareous degeneration of its arteries. A portion of the left choroid plexus had undergone the same change, and the mineral mass thus produced compressing the vena Galeni, caused an effusion of serum which distended the posterior cornu of the left lateral ventricle. The lesion, then, which caused the chief cerebral symptoms was limited to the left hemisphere, and did not involve the *corpora striata*, *optic thalami*, *crura cerebri*, *pons*, *medulla oblongata*, or *cerebellum*. If the Turveydrop of our Cincinnati Hospital will make as close and accurate diagnosis in the cases of cerebral disease which will come under his care hereafter, the profession of this city will be prepared to admit his claim to be considered the Cincinnati Trousseau—the genius equally strong in politics and medicine.

So unprecedented does this genius regard the lesions in the Lawler case, that he intimates I have constructed them out of

whole cloth, just as he made a case of typhoid fever out of abscesses of the kidneys. He appears to be entirely ignorant of the fact that such degeneration of the choroid plexus is not at all uncommon; and to be ignorant of that other fact, equally as common, that compression of the vein of Galen causes an accumulation of serosity in the ventricle. The brilliant editor of the *Lancet and Observer* and C. G. Comegys, M. D., are twin brothers in ignorance on these topics. In the previous number of the REPERTORY I furnished the editor with some information; and to this the gigantic hospital teacher—our *Trousseau*—is now referred. I do not stop to disturb that singular but harmless delusion under which he labors, that the calcareous mass attached to the choroid plexus was a brain tumor.

I now come to the condition of the heart. The editor and the clinician are here entirely in accord. These two luminaries cannot understand why I should not make the autopsy to interpret at all points my diagnosis. A mitral murmur during life and no dropsy, no cough, no enlarged liver! A strange contradiction do they here discover, which they make haste to expose. Is it possible that these remarkable men cannot understand how calcareous masses attached to the *chordae tendinae* of the mitral, could cause a murmur with the first sound, although the valves themselves may be competent enough to prevent regurgitation? If they cannot understand this, it is useless to argue the question further. Comegys—our *Trousseau*—brilliant in generalization and experienced in tergiversation—I believe that is the word—takes refuge in a general denial. The autopsy never was made—the so-called brain tumor, the alterations of the heart and arteries, are creatures of the imagination—no man has seen these wonders; “if he shall continue to insist upon it, I [that is C. G. Comegys, Cincinnati *Trousseau*] demand the name of a doctor or other person who witnessed it.”

Oh, cruel and ferocious Comegys! will you not rest content with my humble affirmation that I actually did with my own hands, and in the presence of diverse persons, make an autopsical examination of the late Mr. Davis B. Lawler? It is true—and I confess it with deep humiliation and contrition—that YOU were not invited to be present, whence YOU, not unnaturally, conclude that all the world was absent, and that the autopsy was a myth.

MERCER COUNTY MEDICAL SOCIETY.

REPORT OF COMMITTEE ON PATENT MEDICINES AND QUACK REMEDIES.

[Published by order of the Society.]

Mr. President and Fellows of the Society :

The task you have imposed upon me is an ungracious one. If the subject assigned me sustains any connection to medical literature it is remote. Whilst it is undeniable that the popular abuses, which it becomes my duty to unmask and expose, are fraught with incalculable injury to the non-medical public, I have never believed that a thorough conviction can proceed from any other source than a bitter experience of their evil tendencies. Hence I am rather inclined to let these, as every kindred imposture, work their own cure.

Another aspect of the subject, however, would seem to counsel a different course. From the relation subsisting between the cultivated physician and the non-medical public there are certain obligations that each owes to the other, from which neither can be absolved. Whatever bearing it may have upon his pecuniary interests, however his motives may be impugned and his conduct misconstrued, as the constituted guardian of the health of the community, it is the imperative duty of the physician, whose scientific scrutiny alone can detect them, to raise a note of warning against all disease-producing causes; not excepting the fearful amount of disease and mortality annually occasioned by the *nostrums* of medical quacks.

Lord Bacon once said that "witches and imposters have always held a competition with doctors." With no less truth he might have added that they have always conducted a successful conspiracy against the welfare of the non-medical public.

No profession is so infested and overrun with quacks and ignorant pretenders as that of medicine. In every conceivable form, under every specious name, in every civilized country, quackery prevails. In no country on this planet, approximating a state of enlightenment, is there such a mania for medical impostures as in the United States. It is bolstered up and fostered by the learned and unlearned—the honorable and dishonorable—judges, lawyers, clergymen, and conductors of public prints. Here all grades of society meet on a common

level, and are equally duped. It seems to be a natural growth of our country, because it finds here all the elements of nutrition and development, and is nurtured with assiduous care. Other countries, more acutely alive to their own safety, have thrown around them such safeguards as to secure their immunity from its fatal consequences. Even benighted Mexico is far ahead of us in this respect, and, by her legislation, has protected her citizens from the ravages of quackery. Her physicians are required to be graduated Doctors of Medicine; and, in addition, they must undergo a rigid examination before they are permitted to practice. Her apothecaries are subjected to like examination. All patent medicines are contraband, unless indorsed by a label indicating the ingredients and proportions of which they are composed. And thus, by the strong arm of the law, has Mexico done all she could to protect, not her physicians, but the whole community, from the fatal consequences of medical imposture—an example eminently worthy of imitation.

The particular phase of empiricism you have assigned me is that of *patent medicines* and *quack remedies*; and though wholly disinclined to disturb the popular enthusiasm relative to the fancied supernatural agencies employed by these ignorant pretenders; and although quackery in its various forms but sows the seed of a more plentiful harvest for the regular profession, I cheerfully accept the situation, and restrict my remarks mainly to this branch of the subject—first, because the non-medical public are presumed to be incapable of detecting the fraud and apprehending the fearful consequences of the enormous consumption of these drugs; and second, because many of these secret nostrums, when subjected to the chemical test, are found to contain most potent ingredients, extremely poisonous when misapplied, and, by their indiscriminate employment, the foundation is laid for numberless serious maladies, the true cause of which is never dreamed of, but probably increasing the disease and mortality of our country fifty per cent.

The enemy to human health lies in deep, profound concealment. The secret haunts and lurking places, from which he sends out his deadly influences, are impenetrable except by scientific vision. To the light emanating from medical science alone is society indebted for a knowledge of the position he occupies, and the only successful means of disarming him of his power to harm.

Without it, the whole future is shrouded in impenetrable gloom. With it, our path-way is radiant with hopes of future health and security. Patent medicines, and secret *nostrums*, furnish no exception to this remark.

The cultivated physician has an important work to perform in this connection. By the unthinking, heedless multitudes, his warnings will probably be disregarded. But he will gain the ear of the more considerate and reflecting. He should not, in the remotest degree, give countenance to these delusions. Such things should be left to the fawning, ignorant, unprincipled adventurer, who has caught at the tide of popular credulity to raise himself into temporary notice,—soon to sink beneath its waves in utter contempt never to rise again.

What a commentary on the remedial power of these vaunted agents does their history afford! Had half they promised been realized, their age would have been measured by centuries. But how short their journey, how ephemeral their existence! Most of them have foundered in a brief space of time, and the longest lived have done little more than "point a moral." It will be conceded that, in regard to remedial agencies, their longevity is the true measure of their value, and their claim to public confidence. Try, by this rule the thousand and one medicines that have secured the protection of the King's patent, and Uncle Sam's patent; and how many have stood the test of a fair trial? Disappointment has been the fate of the recipient, and oblivion that of the drug. Their projectors have managed by one artifice and another, to bask in the sunshine of popular credulity long enough to amass handsome fortunes, conscious, all the while, that their enterprise was a lie, and their patrons dupes.

During the brief space of time that has elapsed since I entered the arena of professional life, the history of Empiricism is significant and suggestive. How changed its literature! Where are the popular inscriptions by which the multitudes were dazzled to infatuation? Dr. Cullen's *Indian Vegetable Panacea*? Dr. Swayne's *Compound Syrup of Wild Cherry*? Dr. McKenzie's *Corn Destroyer*? Dr. Bristol's *Compound Syrup of Sarsaparilla*? Dr. Duncan's *Expectorant Remedy*? Dr. Buchan's *Hungarian Balsam of Life*? Dr. Zanoë's *Hair Powder*? Dr. Osgood's *Indian Chologogue*? Dr. Salter's *Ginseng Panacea*?—these, and a thousand

others—where are they? They came and went, with the deceiver and the dupe,—all into the land of forgetfulness.

Also, on my first debut into the professional circle, the Thompsonian system had just gained the popular ear, and swayed the popular mind. Upon every green valley and hill top a steamery was found. Its most distinguishing characteristic consisted in its miraculous power of transforming hostlers into doctors in the incredible brief space of a fortnight. It was conceived in vanity—brought forth in a reckless disregard of human life,—and existed in the grossest ignorance of the laws which govern the human organism, whether in health or disease. To compel a sick girl to drink a quart of lobelia, and then a gill of the tincture of red pepper in a single night, and wind up in the morning with a dose of No. 6, was one of its boasted feats; and afford but a feeble specimen of the recklessness of the practice. A few suits against its practitioners for manslaughter gave the concern a downhill tilt; its once brisk fires are now smouldering, and the distillery of No. 6 dribbles *guttatim*, yet the supply equals the demand. Even the court of the Empiricism no longer authorises such treatment for an inflammation. A change of tactics is demanded. New munitions must be supplied. Science is moving steadfastly onward and must be grappled. The shoals and quicksand on which Thompsonianism had stranded must be avoided. The positive evils inflicted on society by the blundering of steam practice must be shunned. The negative position therefore is at once assumed, and hence is verified the old adage, that extremes often meet. The *vis medicatrix naturæ* is sometimes all-potent in arresting morbid action, and developing the great law of recuperation; and this is a safe capital to bank upon. Popular attention, however, must be arrested, and popular favor secured. Hence, upon the banner of this new school floats the fascinating motto *similia similibus curantur!* Ignorant of the means most favorable for developing the law of recuperation, the professors of this new system very wisely conclude to do nothing. With a tiny box of pills, containing each a millionth of a grain of the extract of *aconitum napellus*; a tenth of a millionth of a drop of the juice of *atropa belladonna* in a little vial, he starts out, armed cap-a-pie, on a crusade against the numberless “ills that flesh is heir to.” One pill out of the box in the morning!—one drop from the vial at

night ! Such practitioner may well lay the flattering unction to his soul that he has escaped the catastrophe into which the folly of the steam doctor had betrayed him ; but query : Has he not, by the undertaking, tacitly engaged to do all that the science and the art of medicine can accomplish ? and will he not be held to this engagement at the bar of his country and at the court of Heaven ? Thus Homeopathy is seen to be inefficient, and the ultimate failure anticipated.

A new degree, therefore, is instituted by the court. Walk into this new department. It is true its walls and ceiling, and floor are wet and cold ; but don't fear to enter. You may have Pleurisy, or Rheumatism, or Pneumonia, or Consumption ; but never mind ;—sit down and receive the cold douche ; or lie down and wrap yourself in the cold dripping sheet. Steam and hot chunks used to be the proper remedies. That, however, was a time of ignorance, and the practice suited the vulgar herd ; this is a refined age, and the court has instituted a new degree, adapted to our present state of enlightenment. Send round the placard. Let your friends be warned against family physicians ;—all regular doctors. Be equally on your guard against Homeopathy. Rely on water *only*. Nothing can live without *water* ; nothing can die with it. To all which, I have this remark to make : Water is a very powerful agent, and is so regarded by every enlightened physician. It is an agent, however, that should be employed with great discrimination. As a system of practice, it is plausibly objected, that those who exercise it, are usually illiterate men, who know but little of the laws of life in their relation to vital stimuli ; and consequently do not discriminate between the cases in which it is beneficial and those in which it is rapidly fatal. Since water, as employed in these water-cure establishments, bears a therapeutical relationship to but a limited number of diseases, and these wiseacres profess to cure everything on a common principle, it is exceedingly difficult to determine whether the cured or the victims of mal-treatment predominate.

The whole enginery of Empiricism, embracing irregular systems of practice, and individual nostrums claiming specific control over certain forms of disease, is predicated on two therapeutical assumptions, which are alike as flimsy and unsubstantial as "the baseless fabric of a vision." The first is the doctrine

of specifics in medicine. No remedies are properly such. Their existence is contradicted by the philosophy of the laws of life and the phenomena of disease. Their employment is purely empirical, involving a disregard of established pathological and therapeutical principles. The second assumes the contamination of the blood, as the proximate cause of disease, and the medication of that fluid for its cure. Or, in other words, the seminal principle of disease consists in a blood poison; and, as a corollary, the indications of a cure are best fulfilled by the employment of such agents as deplete the blood. The whole superstructure of Empiricism is reared upon these two dogmas; and by so much as the members of the regular profession maintain and propagate these hypotheses, by just so much do they lend a helping hand to quackery in all its protean forms.

I have given an imperfect inventory of some of the most noted of those *specifics* and *blood purifiers* that have run a brilliant but fugitive career since the period of my earliest Esculapian struggles; not one of which, however, now exists, save in the dim recollection of a few survivors. What signify failures and miscarriages, disappointed hopes and unredeemed pledges? A fresh brood of nostrums confronts a new generation. The priests who minister to the altar of Empiricism are still numberless. Its votaries may be called legion. The *Infallible Boluses*—*Dulcified Panaceas*—*Tasteless Catholicons*—*Matchless Sanatives*—*Warranted Specifics*—*Universal Resuscitators*, seem to have lost none of their fascinations;—the blind credulity of the public is undiminished. The hecatombs of slaughtered thousands in the past afford no security against the future.

To many, the fatal delusions so fondly cherished by the popular mind in regard to medicine, are a profound mystery; and I have myself been sometimes amazed at the infatuation of a people, on all other subjects intelligent, shrewed, and cautious, yet, on the important subject of health, perfectly reckless. It grows out of the natural constitution of the human mind, in connection with the profound intricacies of medical science, and the general ignorance of the masses as to the merits of medical men, and the virtues of remedial agents. These constitute the *substratum* on which Empiricism is based—the very aliment on which it subsists.

An attentive survey of the life and character of the authors of

patent medicines, and the projectors of Empirical systems of practice, will pour in upon our mental optics a flood of light, and restrain our surprise at the court that is paid to these men, and the confidence reposed in their remedies, by the non-medical public. As a general thing, they are found to be medical scholars, and afford ample proof that, in our profession, there is no necessary connection between learning and success. An extensive and liberal education will, undoubtedly, give a man a better chance of success; but it does not, and wisely is it ordained that it should not, command success, where natural genius is wanting. There are numerous proofs among the living that a man may be crammed brimful of literature and science, and yet may not have the power to apply these acquisitions so as to obtain success. How often is the finest seed sown on a soil that can never render it prolific? In ours, as in the other learned professions, many creep in who have missed their calling. Mentally and morally incapacitated for an honorable competition in the regular profession, they fail of success. Chafed by disappointment, and reduced in purse, pinching want impels them to some cornucopian dodge. Various devices are resorted to by the respective adventurers, according to taste and inclination. A. becomes an itinerant doctor. Stirred in his inmost soul with feelings of humanity, and overflowing with sympathy, he waits not to be sought, but travels from village to village, from city to city,—anywhere, so that he keeps out of reach of the mortifying circumstances of his early professional and signal failures. B. is suddenly seized with a conviction of the manifold errors that characterize the regular practice; (which has undergone the revision and scrutiny of every medical scholar from Hippocrates to the present time;) and forthwith changes his tactics, and in the metamorphosis, a Homeopathist, a Hydropathist, an Eclectic, or Botanic, turns up. C. has been, for long and tedious years, in search of a remedy, that no other man has been privileged to dream of, and by elaborate research, expensive observation, and oft repeated chemical experiments, has, at last, discovered the great *Panacea*,—a balm for every wound, a cordial for every malady that flesh is heir to. Each and all of these mountebanks, dead to all the finer impulses of the soul, and alive only to a passion for lucre, finding a ready resource, and ample theater for the display of their imposture, in a credulous public, have pla-

carded, in large conspicuous letters, on every street corner, and at every cross-road, in the land, the superior claims and unrivalled virtues of their respective cures. With honey on their lips, these manifestoes breathe nothing but aspirations for the public good; while analysis of their operations is very sure to trace their origin to private emolument.

Pertinent to our subject, and bearing more directly upon the character and usefulness of our profession, is the extent to which these evils are found to exist within its limits. With a deficiency of moral and mental endowments, which precludes the possibility of success by fair, open, manly competition, some men, nevertheless, to enjoy its privileges and immunities, cling like parasites to the outskirts of the profession, and compensate a lack of mental force and moral excellence by the artifices of the charlatan. Detraction, circumvention, dissimulation, and under bidding—all prompted by conscious inferiority, are with them staple devices.

I must not be understood as laying the lash of censure generally on the professional back. On the contrary, I am gratified at being able to bear testimony to the great purity of character gentlemanly bearing, and high standard of moral excellence, attained by the great mass of our profession. It is with profound regret that I have to allude to these exceptional cases, who, dazzled to infatuation by the glitter of the golden wedge, and the splendor of the Babylonish garment, like Achen in the camp of Israel, only assume the livery of Esculapius to serve the devil in.

If, when called in consultation with a professional brother, if the patient recover, I whisper to some friend of the party: "It was fortunate I was called just in the nick of time;" or, if he die: "It is a pity I was not called a half hour sooner; if, in the round of daily professional duty, I intimate that I am in possession of some remedy, of which the profession, generally, know nothing; if I claim to have special knowledge of the peculiar constitution of certain families, so as to render me the only safe medical adviser; if I claim superior knowledge and skill in a given class of diseases, and give countenance to the gossip that I am the best woman's doctor in the land; if I seek notoriety by resorting to public advertisements, or private cards or handbills, inviting the attention of individuals affected with particular dis-

eases; if I give any intimation to any one, directly or indirectly, that may be construed into a bid for his practice, or do anything that might tend to embarrass or influence his free, voluntary choice in the selection of a medical adviser; if I fail to conform in my charges to those that are customary amongst my companions in labor; if the whole or any of these allegations may be justly predicated of my professional conduct, then I brand myself as a medical quack, forfeit the recognition of the brotherhood, tacitly admit that I am incapable of sustaining myself in an even rivalry—that lucre, not honor and usefulness, is the great lever of my professional life—that I retain a place in a high and noble profession, only to desecrate its sacred altars, and pervert it to the vilest of purposes.

The community who are the unfortunate but unconscious dupes of these various grades of medical interlopers, ought to know that no more dangerous principle could be infused into an enterprise than that which sets lucre against virtue.

C. H. SPILMAN, M. D.,

Committee.

UNCONSCIOUS CEREBRATION.

BY FRANCES POWER COBBE.

The old Hebrew necromancers were said to obtain oracles by means of Teraphim. A Teraph was the decapitated head of a child, placed on a pillar and compelled by magic to reply to the questions of the sorcerer. Let us suppose, for the sake of illustration, that the legends of such enchantments rest on some groundwork of facts; and that it might be possible, by galvanism or similar agency, to make a human corpse speak, as a dead sheep may be made to bleat. Further, let us suppose that the Teraph only responded to inquiries regarding facts known to the owner of the head while living, and therefore (it may be imagined) impressed in some manner upon the brain to be operated on.

In such a Teraph we should, I conceive, possess a fair representation of the mental part of human nature, as it is understood by a school of thinkers, considerable in all ages, but especially so at present. "The brain itself," according to this doctrine, "the white and gray matter, such as we see and touch it, irrespective of any imaginary entity beside, performs the functions of Thought and Memory. To go beyond this all-sufficient brain, and assume that our conscious selves are distinct from it, and somewhat else beside the sum-total of its action, is to indulge an

hypothesis unsupported by a tittle of scientific evidence. Needless to add, the still further assumption, that the conscious self may possibly survive the dissolution of the brain, is absolutely unwarrantable."

It is my very ambitious hope to show, in the following pages, that, should physiology establish the fact that the brain, by its automatic action, performs all the functions which we have been wont to attribute to "Mind," that great discovery will stand alone, and will not determine, as supposed, the further steps of the argument; namely, that our conscious selves are nothing more than the sum of the action of our brains during life, and that there is no room to hope that they may survive their dissolution.

I hope to show, not only that these conclusions do not necessarily flow from the premises, but that, accepting the premises, we may logically arrive at opposite conclusions. I hope to deduce from the study of one class of cerebral phenomena, a presumption of the *separability* of the conscious Self from the thinking brain; and thus, while admitting that, "Thought may be a function of Matter," demonstrate that the Self in each of us is not identifiable with that which, for want of a better word, we call "Matter." The immeasurable difference between such a remembering lip-moving Teraph as we have supposed and a conscious Man indicates, as I conceive, the gulf leaped over by those who conclude that, if the brain can be proved to think, the case is closed against believers in the spirituality and immortality of our race.

In brief, it is my aim to draw from such an easy and every-day psychological study as may be verified by every reader for himself, an argument for belief in the entire *separability* of the conscious self from its thinking organ, the physical brain. Whether we choose still to call the one "Spirit" and the other "Matter," or to confess that the definitions which our fathers gave to these terms have ceased to be valid in the light of Modern Science—that "Matter" means only "a form of force," and that "Spirit" is merely "an unmeaning term for an unknown thing"—this verbal controversy will not in any way affect the drift of our argument. What we need to know is this: Can we face the real or supposed tendency of science to prove that "Thought is a function of Matter," and yet logically retain faith in personal Immortality? I maintain that we may accept that doctrine and draw from it an indirect presumption of immortality, afforded by the proof that the conscious self is not identifiable with that Matter which performs the function of a thought, and of whose dissolution alone we have cognizance.

My first task must be to describe the psychological facts from which our conclusions are to be drawn, and which seem in themselves sufficiently curious and interesting to deserve more

study on their own account than they have yet received. Secondly, I shall simply quote Dr. Carpenter's physiological explanation of these facts. Lastly, I shall, as shortly as possible, endeavor to deduce from them that which appears to me to be their logical inference.

The phenomena with which we are concerned have been often referred to by metaphysicians,—Leibnitz and Sir W. Hamilton amongst others—under the names of "Latent Thought," and "Preconscious Activity of the Soul." Dr. Carpenter, who has discovered the physiological explanation of them, and reduced them to harmony with other phenomena of the nervous system, has given to them the title of "Unconscious Cerebration;" and to this name, as following in his steps, I shall in these pages adhere. It will probably serve our purpose best, in a popular paper like the present, to begin, not with any large generalizations of the subject, but with a few familiar and unmistakable instances of mental work performed unconsciously.

For example; it is an every-day occurrence to most of us to forget a particular word or a line of poetry, and to remember it some hours later, when we have ceased consciously to seek for it. We try, perhaps anxiously at first, to recover it, well aware that it lies somewhere hidden in our memory but unable to seize it. As the saying is, we "ransack our brains for it," but failing to find it, we at last turn our attention to other matters. By and by when, so far as consciousness goes, our whole minds are absorbed in a different topic, we exclaim, "Eureka! The word or verse, is—So and so." So familiar is this phenomenon that we are accustomed in similar straits to say, "Never mind, I shall think of the missing word by and by, when I am attending to something else;" and we deliberately turn away, not intending finally to abandon the pursuit, but precisely as if we were possessed of an obedient secretary or librarian, whom we could order to hunt up a missing document, or turn out a word in a dictionary while we amused ourselves with something else. The more this very common phenomenon is studied, the more I think the observer of his own mental processes will be obliged to concede, that, so far as his own conscious Self is concerned, the research is made absolutely without him. He has neither pain nor pleasure, nor sense of labor in the task, any more than if it were performed by somebody else; and his conscious Self is all the time suffering, enjoying, or laboring on totally different grounds.

Another and more important phase of unconscious cerebration is that wherein we find our mental work of any kind, a calculation, an essay, a tale, a composition of music, painting or sculpture, arrange itself in order during an interval either of sleep or wakefulness, during which we had not consciously thought of it at all. Probably no one has ever written on a subject a

little complicated, or otherwise endeavored to think out a matter any way obscure, without perceiving next day that the thing has somehow taken a new form in his mind since he laid down his pen or pencil after his first effort. It is as if a "Fairy Order" had come in the night and unravelled the tangled skeins of thought and laid them all neatly out on his table. I have said that this work is done for us either asleep or awake, but it seems to be accomplished most perfectly in the former state, when our unconsciousness of it is most complete. I am not now referring to the facts of somnambulism, of which I must speak by and by, but of the regular "setting to rights" which happens normally to the healthiest brains, and with as much regularity as, in a well-appointed household, the chairs and tables are put in their places before the family come down to breakfast.

Again there is the ordinary but most mysterious faculty possessed by most persons, of setting over night a mental alarm-clock, and awaking, at will, at any unaccustomed hour out of dreamless sleep. Were we up and about our usual business all night without seeing or hearing a timepiece, or looking out at the stars or the dawn, few of us could guess within two or three hours of the time. Or again, if we were asleep and dreaming with no intention of rising at a particular time, the lapse of hours would be unknown to us. The count of time in dreams is altogether different from that of our waking life, and we dream in a few seconds what seem to be the events of years. Nevertheless, under the conditions mentioned of a sleep prefaced by a resolution to waken at a specified hour, we arrive at a knowledge of time unattainable to us either when awake or when sleeping without such prior resolution.

Such are some of the most striking instances of unconscious cerebration. But the same power is obviously at work during at least half our lives in a way which attracts no attention only because it is so common. If we divide our actions into classes with reference to the Will, we discover that they are of three kinds—the Involuntary (such as the beating of the heart, digestion, etc.), the Voluntary, and the volitional. The difference between the two latter classes of actions is, that *Voluntary* motions are made by permission of the Will, and can be immediately stopped by its exertion, but do not require its conscious activity. *Volitional* motions, on the contrary, require the direct exertion of Will.

Now of these three classes of actions it would appear that all Voluntary acts, as we have defined them, are accomplished by Unconscious Cerebration. Let us analyze the act of walking, for example. We intend to go here or there; and in such matters "he who wills the end wills the means." But we do not deliberately think, "now I shall move my right foot, now I shall put my left on such a spot." Some unseen guardian of our muscles

manages all such details, and we go on our way, serenely unconscious (unless we chance to have the gout or an ill-fitting boot) that we have any legs at all to be directed in the way they should go. If we chance to be tolerably familiar with the road, we take each turning instinctively, thinking all the time of something else, and carefully avoid puddles or collisions with fellow-passengers, without bestowing a thought on the subject. Similarly, as soon as we have acquired other arts beside walking,—reading, sewing, writing, playing on an instrument,—we soon learn to carry on the mechanical part of our task with no conscious exertion. We read aloud, taking in the appearance and proper sound of each word and the punctuation of each sentence, and all the time we are not thinking of these matters, but of the argument of the author; or picturing the scene he describes; or possibly, following a wholly different train of thought. Similarly, in writing with “the pen of a ready writer,” it would almost seem as if the pen itself took the business of forming the letters and dipping itself in the ink at proper intervals, so engrossed are we in the thoughts which we are trying to express.

We unconsciously cerebrate,—while we are all the time consciously buried in our subject,—that it will not answer to begin two consecutive sentences in the same way; that we must introduce a query here, or an ejaculation there, and close our paragraph with a sonorous word and not with a preposition. All this we do not do of *malice prepense*, but because the well-tutored sprite, whose business it is to look after our p’s and q’s, settles it for us as a clerk does the formal part of a merchants correspondence.

Music playing, however, is of all others the most extraordinary manifestation of the powers of unconscious cerebration. Here we seem not to have one slave, but a dozen. Two different lines of hieroglyphics have to be read at once, and the right hand is to be guided to attend to one of them, the left to another. All the ten fingers have their work assigned as quickly as they can move. The mind (or something which does duty as mind) interprets scores of A sharps and B flats and C naturals, into black ivory keys and white ones, crotchets and quavers and demi-semi-quavers, rests, and all the other mysteries of music. The feet are not idle, but have something to do with the pedals; and, if the instrument be a double-acted harp, a task of pushings and pullings more difficult than that of the hands. And all this time the performer, the *conscious* performer, is in a seventh heaven of artistic rapture, at the results of all this tremendous business; or perchance lost in a flirtation with the individual who turns the leaves of the music-book, and is justly persuaded she is giving him the whole of her soul!

Hitherto we have noticed the brain engaged in its more servile task of hunting up lost words, waking us at the proper hour, and carrying on the mechanical part of all our acts. But our Familiar

is a great deal more than a walking dictionary, a housemaid, a *valet de place*, or a barrel-organ man. He is a novelist who can spin more romances than Dumas, a dramatist who composes more plays than ever did Lope de Vega, a painter who excels equally well in figures, landscapes, cattle, sea-pieces, smiling bits or *genre*, and the most terrific conceptions of horror and torture. Of course, like other artists, he can only reproduce, develop, combine what he has actually experienced, or read or heard of. But the enormous versatility and inexhaustible profusion with which he furnishes us with fresh pictures for our galleries, and new stories every night from his lending library would be deemed the greatest of miracles, were it not the commonest of facts. A dull clod of a man, without an ounce of fancy in his conscious hours, lies down like a log at night, and lo! he has got before him the village green where he played as a boy, and the apple tree blossoms in his father's orchard, and his long dead and half-forgotten mother smiles at him, and he hears her call him "her own little lad," and then he has a vague sense that this is strange, and a whole marvelous story is revealed to him of how his mother has been only supposed to be dead, but has been living in a distant country, and he feels happy and comforted. And then he wakes and wonders how he came to have such a dream! Is he not right to wonder? What is it—*who* is it that wove the tapestry of such thoughts on the walls of his dark soul? Addison says, "There is not a more painful act of the mind than that of invention. Yet in dreams it works with that care and activity that we are not sensible when the faculty is employed" (*Spectator*, 487). Such are the nightly miracles of Unconscious Cerebration.

The laws which govern dreams are still half unexplained, but the most obvious of them singularly illustrate the nature of the processes of the unconscious brain-work which causes them. Much of the labor of our minds, conscious and unconscious, consists in transmuting Sentiments into Ideas. It is not in this little essay that the subject can be developed in its various branches, the ordinary passions of life,—the religious and moral sentiments (wherein our translations are the source of all our myths and half our errors),* and lastly, insanity, wherein the false sentiment usually creates the intellectual delusion. Suffice it that our conscious brains are forever at work of the kind, "giving to airy nothing" (or at least to what is merely subjective feeling) "a local habitation and a name." Our unconscious brains accordingly, after their wont, proceed on the same track during sleep. Our sentiments of love, hate, fear, anxiety, are each one of them the fertile source of whole series of illustrative

* "E. g. Out of the Sentiment of the justice of God come Ideas of a great Final Assize and Day of Judgment. Out of the Sentiment that He is Author of all things, a definite Idea of six days' world-making," etc., etc. (From a Sermon by Rev. James Martineau.)

dreams. Our bodily sensations of heat, cold, hunger, and suffocation, supply another series often full of the quaintest suggestions,—such as those of the poor gentleman who slept over a cheesemonger's shop and dreamt he was shut up in a cheese to be eaten by rats; and that of the lady whose hot bottle scorched her feet, and who imagined she was walking into Vesuvius. In all such dreams we find our brains with infinite play of fancy merely adding illustrations like those of M. Dore to the page of life which we have turned the day before, or to that which lies upon our beds as we sleep.

Again, the small share occupied by the Moral Law in the dream world is a significant fact. So far as I have been able to learn, it is the rarest thing possible for any check of conscience to be felt in a dream, even by persons whose waking hours are profoundly imbued with moral feeling. We commit in dreams acts for which we should weep tears of blood were they real, and yet never feel the slightest remorse. On the most trifling provocation we cram an offending urchin into a lion's cage (if we happen to have recently visited the Zoological Gardens), or we set fire to a house merely to warm ourselves with the blaze, and all the time feel no pang of compunction. The familiar check of waking hours, "I must not do it, because it would be unjust or unkind," never once seems to arrest us in the satisfaction of any whim which may blow about our wayward fancies in sleep. Nay I think that if ever we do feel a sentiment like Repentance in dreams, it is not the legitimate sequel to the crime we have previously imagined, but a wave of feeling rolled on from the real sentiment experienced in former hours of consciousness. Our dream-selves, like the Undines of German folk-lore, have no Souls, no Responsibility, and no Hereafter. Of course this observation does not touch the fact that a person who in his conscious life has committed a great crime may be haunted with its hideous shadow in his sleep, and that Lady Macbeth may in vain try and wash the stain from her "little hand." It is the imaginary acts of sleeping fancy which are devoid of moral character. But this immoral character of unconscious cerebration precisely tallies with the Kantian doctrine, that the moral will is the true *Homo Neumenon*, the Self of man. This conscious self being dormant in dreams, it is obvious that the true phenomena of conscience cannot be developed in them. Plutarch says that Zeno ordered his followers to regard dreams as a test of virtue, and to note it as a dangerous sign if they did not recoil, even in their sleep, from vice; and Sir Thomas Browne talks solemnly of "Sinful Dreams," which ecclesiastical history abundantly shows have proved terrible stumbling-blocks to the saints. But the doctrine of Unconscious Cerebration explains clearly enough how, in the absence of the controlling Will, the animal elements of our nature assert themselves—generally in the

ratio of their unnatural suppression at other times—and abstinence is made up for by hungry Fancy spreading a glutton's feast. The *want* of sense of sin in such dreams is, I think, the most natural and most healthful symptom about them.

But if moral Repentance rarely or never follow the imaginary transgressions of dreams, another sense, the Saxon sense of Dissatisfaction in unfinished work, is not only often present, but sometimes exceedingly harrassing. The late eminent physician, Professor John Thomson, of Edinburg, quitted his father's cottage in early manhood, leaving half-woven a web of cloth on which he had been engaged as a weaver's apprentice. Half a century afterwards the then wealthy and celebrated gentleman still found his slumbers disturbed by the apparition of his old loom, and the sense of the imperative duty of finishing the never-completed web. The tale is like a parable of what all this life's neglected duties may be to us, perchance in an absolved and glorified Hereafter, wherein, nevertheless, *that* web which we have left undone will have passed from our hands forever! Of course, as it is the proper task of the unconscious brain to direct voluntary labors started by the will, it is easy explicable why it should be tormented by the sense of their incomplection.

But leaving the vast half-studied subject of dreams (a whole mine as it is of psychological discovery), we must turn to consider the surprising phenomena of Unconscious Cerebration, developed under conditions of abnormal excitement. Among these I class those mysterious Voices, issuing we know not whence, in which some strong fear, doubt or hope finds utterance. The part played by these Voices in the history both of religion and of fanaticism it is needless to describe. So far as I can judge, they are of two kinds. One is a sort of lightning-burst, suddenly giving intensely vivid expression to a whole set of feelings, or ideas which have been lying latent in the brain, and which are in opposition to the feelings, and ideas of our conscious selves at the moment. Thus the man ready to commit a crime hears a voice appealing to him to stop; while the man praying ardently for faith hears another voice say, "There is no God." Of course the first suggestion is accredited to heaven, and the second to the powers of the pit; but the source of both is, I apprehend, the same. The second class of voices is the result, not of unconscious Reasoning but of unconscious Memory. Under some special excitement, and perhaps inexplicably remote association of ideas, some words which once made a violent impression on us are remembered from the inner depths. Chance may make these either awfully solemn, or as ludicrous as that of a gentleman shipwrecked off South America, who, as he was sinking and almost drowning, distinctly heard his mother's voice say, "Tom! did you take Jane's cake?" The portentous inquiry had been addressed to him forty years previously, and (as might

have been expected) had been wholly forgotten. In fever, in a similar way, ideas and words long consigned to oblivion are constantly reproduced; nay, what is most curious of all, long trains of phrases which the individual had indeed heard, but which could hardly have become a possession of the memory in its natural state, are then brought out in entire unconsciousness. My readers will recall the often-quoted and well-authenticated story of the peasant girl in the Hotel Dieu in Paris, who, in her delirium, frequently "spouted" Hebrew. After much inquiry it was found she had been cook to a learned priest who had been in the habit of reading aloud his Hebrew books in the room adjoining her kitchen. A similar anecdote is told of another servant-girl who in abnormal sleep imitated some beautiful violin-playing which she had heard many years previously.

(To be continued.)

CURABILITY OF PHTHISIS PULMONALIS.

[Dr. Beauchamp's poetry is very good, and we are glad of the opportunity to enliven our pages with it. We hope, however, he will excuse us in taking the liberty to extend the extract from Dr. Dutcher's article in our January number for fear Dr. D. might not consider himself fairly represented.

"To abandon vicious habits is no easy task. The of man's moral nature is such that he finds gratification in vicious indulgences. This proclivity in man's mental constitution is frequently a great obstacle in the way of our benefitting the afflicted of the race. They are not always willing to relinquish their vicious habits. We prescribe for their physical maladies but all in vain. They eke out a wretched existence in this world, die in their sins, and go to perdition in the next."]

DEAR EDITOR :—I do not, as a general thing, wish or attempt to criticize, but I must break my rule, now, and call your attention to some very dogmatical expressions in the article of A. P. Dutcher, M. D. January, 1871, vol. iv. number 1. He takes the ground and expresses the belief that Phthisis is a curable disease (Having the disease myself, I wish that I could indulge in his confidence in its curative character.)

"They eke out a wretched existence in this world, die in their sins, and go to perdition in the next."

That their existence is wretched, I admit, and am well aware. That to succumb to their "tittle" is sinful, I deny. That they "go to perdition in the next" I say—

Take one grain of purest gold
With baser metal well combined,
With lead and zinc and iron old
(Nor leave the dross behind,)
Till not one atom part is seen
Of either in its native form:
Then cast in any mould you ween,
While yet the mixture's soft and warm;
You dare not doubt, the gold is there,
Although 'tis hid from sight; 'tis true
That art can bring again with care
The self-same grain of gold to view;
Pure as from the crystal stream,
It washed upon the shining shore,
As visioned in the miner's dream
When seeking for the precious ore.
Thus the soul, though cast in mould
Of human form by hand divine,
In carnal mixture, we are told,
The matter with the mind combine;
(So close, nor eye, nor touch can tell
How soul with flesh and blood can dwell.)
Yet all must know the spark is there,
(A ray of spirit sent at birth)
Perfect from Heaven's vital sphere,
To animate this form of earth;
So is the soul when freed again
From carnal contact with the earth,
As pure and sinless as it came
In all its beauty at our birth.

H. BEAUCHAMP, M. D.

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA.

The Medical Society of the District of Columbia held its fifty-third annual meeting Monday night, at the Colonization building, corner of Four-and-a-half street and Pennsylvania avenue, for the election of officers. After the reading of the minutes of the last semi-annual meeting, W. P. Johnston, M. D., the retiring president, presiding, and after a very handsome valedictory, in which he reviewed the operations of the society for the past year, and made some valuable suggestions for its future guidance, then announced that the first regular business before the society was the election of officers for the ensuing year.

The election was held, and resulted as follows: President, Dr. J. M. Toner; vice presidents, Drs. S. C. Eusey and Wm. Marbury; corresponding secretary, Dr. W. B. Drinkard; recording secretary, Dr. W. Johnston; treasurer, Dr. F. A. Ashford; librarian, A. F. A. King; board of examiners, Drs. W. G. Palmer, D. R. Hagner, Lewis Mackall, Jr., B. Thompson, C. M. Ford; censors, C. H. Lieberman, J. F. Thompson, and Thomas Miller.

Dr. Toner, upon taking the chair, thanked the society in a neat and

appropriate manner for the honor done him in electing him to preside over the deliberations of this, the oldest and largest medical organization in the District.

THE ANNUAL ADDRESS AND SUPPER.

The annual address and supper of the Medical Society of the District of Columbia took place on Wednesday evening in the Medical Hall, corner of F and Tenth streets, and was called to order, at 8 o'clock P. M., by the president, Dr. J. M. Toner, who said that the Medical Society of the District of Columbia had met here to-night for the especial purpose of celebrating its fifty-third anniversary, and had invited those present to join them to dignify and grace the occasion. The society would, therefore, dispense with the usual proceedings, and call upon Dr. Palmer, chairman of the Committee of Arrangements, to announce at once the programme. In addition to the members of the society, and their friends, a large representation of citizens, ladies and gentlemen, attracted by the public invitation extended, were in attendance.

Dr. Palmer then stepped forward and introduced Dr. S. C. Busey, the orator of the evening.

The learned speaker acknowledged the beneficence of Providence in preserving the lives of the members of the society devoted to the alleviations of the suffering of their fellow-men. He said the society, among other causes for gratitude, might be thankful that within the past year but one of their brotherhood had been removed by death. Ten of the original corporators of the amended act of 1838 of the society survive, and their useful career is unsullied by the slightest blemish upon their professional or private character. They are still in the full possession of their faculties, and he hoped many years would yet add lustre to their brilliant professional achievements. The doctor, in an attractive manner, drew life-pictures in the experience of a physician, dealing with those in high and humble spheres, and adverted to the general obduracy of young ladies in refusing the counsel of her physician, and persisting in the most flagrant violations of the laws of health. He also alluded to the intemperate habits of young men, and portrayed the horrors of the frenzy consequent upon excessive indulgence in dissipation.

He said he presumed success in the medical, as in other professions and the trades, is measured by merit; but while a charlatan may acquire familiarity with the uses and application of his nostrums, he can never skillfully trace cause and effect. As long as disease affects the human family there will be antagonisms between health and disease—science and ignorance. He contrasted the three professions, and saw in their several high functions no antagonism in the learned triumvirate. He alluded to the healthfulness of our city, and the commendable efforts being put forth to improve still further its sanitary condition.

The address was a very meritorious and interesting effort, and was listened to with marked attention. At its close Dr. Morgan moved that the speaker be requested to furnish the society with a copy of the address, and that they have it published. Carried.

A little after nine o'clock the meeting adjourned, and the members repaired to Wormley's, corner of Fifteenth and H streets, to partake of their annual supper, and at half past ten o'clock forty of our most prominent physicians took their seats at the table, which was beauti-

fully decorated with flowers and evergreens, and laden with all the good things that an epicurean taste could desire.

Dr. J. M. Toner, the president, occupied the right centre of the table, and in a few fitting remarks welcomed the gentlemen to the feast.

After an hour spent in devouring the eatables and drinkables the committee on toasts, consisting of Dr. F. A. Ashford, Dr. William Lee, and Dr. A. Peter, handed to Dr. Palmer, chairman of the committee of arrangements, the list of regular toasts, which were announced by him, and were appropriately responded to by the members.

Dr. Thomas Miller occupied the head of the table, and responded in a most felicitous manner to the toast of "The Medical Profession of the City of Washington."

Dr. Grafton Tyler was seated at the end of the table, and responded to the toast of "The Medical Profession of Georgetown," and gave a most entertaining account of the early medical men of Georgetown, before Washington City had an existence.

After the regular toasts a general conversation was indulged in, and reminiscences of the past and prospects of the future discussed over well-filled glasses until the wee small hours of Thursday morning.

MEDICAL GLEANINGS.

TREATMENT OF CHILBLAINS.—Mr. Fergus calls attention to the value of sulphurous acid in the treatment of this affection. It should be applied either with a camel-hair brush, or, better, by means of a spray-producer. One application by the latter method usually effects a cure. The acid should be used pure, and he finds Clark's Spray-Producer the best when both hands are free; Richardson's when only one is so. A good wash for hands or feet affected with chilblains, is sulphurous acid three parts, glycerine one part, and water one part. The acid is particularly useful in the irritating, tormenting stage of chilblains.

BELLADONNA IN THE TREATMENT OF SPERMATORRHOEA.—Mr. R. M. Jones, having noticed the advantage accruing from the employment of belladonna in the treatment of incontinence of urine, was induced to try it, some months ago, in nocturnal emissions, and also in those so-called cases of spermatorrhœa consequent upon loss of tone and irritable state of the generative organs, with very beneficial results, even in extreme cases. He generally prescribes it alone, in gradually increasing doses, until the desired effect is produced; but occasionally he gives it in combination with quinine, or the tincture of the muriate of iron, but not with better results, as he has reason to believe that in some instances the iron has a tendency to neutralize the efficacy

of the belladonna. Without entering into the details of the various cases, he considers that the belladonna seems to possess a decided superiority over the iron in soothing the irritable state of the generative organs that is generally present in these cases. It also seems to possess some slight aphrodisiac qualities.

FATAL CASE OF METASTASIS TO THE DURA MATER OF THE BRAIN DURING ACUTE RHEUMATISM.—Dr. Henry Priestley says, that though *cerebral metastasis* is a universally recognized termination of rheumatic fever, yet it is sufficiently rare to warrant recording a case which has just come under his observation in private practice.

On the 18th of August he visited, for the first time, Mrs. W——, a pale, anemic, delicate looking woman, aged 27, who complained of severe pain in one knee, with exacerbations at night. On examination, it was found to be somewhat hotter than natural, and slightly swollen. Inquiry elicited no history of exposure to damp or cold, or of any previous attack. The pulse was soft, and about 90; no great thirst, and no acid perspirations. The case looked like one of idio-pathic synovitis, being confined to one knee; but rheumatism was suspected, and the patient put upon five-grain doses of iodide of potassium three times a-day, with a one-grain opium pill at bedtime, and the joint ordered to be enveloped in cotton wool and oiled silk.

According to expectation, the disease developed itself unmistakably in a few days, attacking the other knee and then the ankle joints. The heart did not become implicated, and the fever was of a mild type. The patient was seen daily up to the 23rd of August, and, no unusual symptoms presenting themselves, a favorable prognosis was given on that day in answer to inquiries from the patient's friends.

At six o'clock on the following morning he was summoned in great haste, and on his arrival, to his surprise, found his patient comatose, and *in articulo mortis*. Her husband told him that up to three o'clock, A. M. his wife had been very restless; that the pain had then suddenly left her joints, which she stretched out in corroboration of her statement, and expressed her belief that she should soon be better; she then dropped off to sleep, and though he noticed that she snored loudly, he did not think any thing of it until, at daybreak, he saw her gastly, death-like features and fixed eyes.

ACUTE PERIOSTITIS IN CHILDREN.—With reference to a boy who was recovering from acute periostitis of the tibia, Mr. Savory said (*Lancet*) that it was note worthy that, though children possess a power of repair more active than adults, they recover much less speedily and completely from the effects of periostitis. This was to be explained by the fact that in them the inflammation is so acute that the periosteum is rapidly destroyed or disorganized into shreds, while in adults a slower process generally allows it to become detached complete, and often leaves it in an almost unimpaired condition, so that it can speedily and systematically replace the bone destroyed. This difference, he said, could easily be demonstrated by a comparison of specimens from young and adult subjects.

ANTI-PHLOGISTIC VALUE OF ERGOT—In a paper read before the N. Y. Med. Jour. Association, Dr. Jacobi remarks that there can be no doubt that ergot acts through the nervous system, and especially through the sympathetic upon the unstripped muscular tissue under its control. Thus it is that ergot produces its peculiar effect upon the muscular tissue of the uterus, the unstripped fibres of the bladder, the muscular layers of the intestines, and especially upon the muscular coat of the blood-vessels. Its power in diminishing the size of the blood-vessels is manifest from its value as a hæmostatic, and it is this power that must be considered in regarding its anti-phlogistic effect. This effect, he considers, is noticeable in fevers generally, and particularly in fevers of the intermittent type, and hence many cases of obstinate intermittent fever will, when no longer benefitted by quinine or arsenic, still be benefitted by the action of ergot. Dr. Jacobi states he has also given a mild preparation of ergot with a uniformly beneficial result in many cases, not uncommon in women and children, of spinal meningitis, evidenced by pain in the spine, slight fever, occasional convulsions, and partial or total paralysis. He has given it advantageously in cases of infantile or dental paralysis, dependent upon congestion of the spinal cord.

In these cases improvement usually commences immediately after the disease has set in, proceeding rapidly for four or five days, slowly for four or five days more, and then stopping. The persistence of the disease he attributes to dilatation of the blood-vessels, and he gives the ergot to effect their contraction.

In cases of St. Vitus' dance, not connected with rheumatism, but with pain in some part of the spinal column, ergot is often serviceable in removing the symptoms. He uses large doses, as a scruple (to an adult), of Boujean's ergotine, or two-drachms (to a child), of Squibb's fluid extract of ergot. He has no fear of gangrene resulting from the use of ergot.—*Med. Record. Practitioner.*

HEMORRHOIDS.—Dr. A. L. Hudson says, in the *Pacific Medical and Surgical Journal* that dry hyd. chlor. mitis applied once or twice a day to tumid and tender hemorrhoids situated about the anus, rarely fails to cure them in a few days.

Book Notices.

FIRST MEDICAL AND SURGICAL REPORT OF THE BOSTON CITY HOSPITAL.
 Edited by J. NELSON BORLAND, Physician, DAVID W. CHEEVER, Surgeon. Boston: Little, Brown & Co. Cincinnati: R. Clark & Co. Svo. pp. 688.

This work is elegantly printed on the best quality of heavy paper, and in its mechanical execution reflects great credit upon the publishers.

Of the cases treated in the Hospital, the 1st article is on Peri-nephritic Abscess, by Henry J. Bowditch, M. D; the 2nd, Excision of Joints, by David W. Cheever, M. D; the 3rd, Cases of Pneumonia, by J. Nelson Borland, M. D; the 4th, Displacement of the Upper Jaw, by David W. Cheever, M. D; the 5th, Treatment of Acute Rheumatism, by John G. Blake, M. D; the 6th, Treatment of Skin Diseases, by Howard F. Damon, M. D. &c, &c.

There are in all thirteen articles upon the various diseases treated in the Hospital during the last five years. They all show the writers to be gentlemen of learning and ability, who have well digested the facts that have come under their observation.

Dr. Blake states, in his article on Rheumatism, that the average stay of patients at the Hospital, under the alkaline treatment, was twenty-four days. "From this, at least, one week should be deducted; many of them remain from ten to fourteen days, and all seven days, after the disease may fairly be said to have been cured. This gives an average of eighteen days as the duration of treatment, which, as will be seen further on, is much briefer than under other methods. It should here be said, that all were placed upon some tonic, either quinine, iron, cod liver oil, or a vegetable bitter, after the discontinuance of alkalies.

"There were treated under the non-alkaline plan 175 cases of well marked acute rheumatism. The remedies were various, and such as have been usually prescribed for many years. The average stay of these cases in the Hospital was thirty-five days. From this seven to ten must be deducted, leaving the duration of treatment twenty-five days."

Dr. Borland thus describes the treatment of pneumonia pursued,

which we are quite sure the majority of our western physicians will not endorse: "Milk always by the bed side for the patient to drink at will, beeftea and wine whey given alternately, regulating the frequency by the severity of the case. In the most severe cases they are given every two hours, three or four ounces, and in some cases, for a while, two ounces every hour alternately, so that the patient gets from six to twelve ounces of sherry wine daily, that is, during the waking hours of the twenty-four. If there is great debility milk punch or brandy is substituted for the wine whey, as soon as possible the alcoholic stimulus is withdrawn, and is replaced by soups, etc. As soon as convalescence takes place, and the patient begins to ask for food, he is placed on a liberal diet of mixed animal and vegetable food. External applications have been made in many cases, by enveloping the entire side affected, or both sides if necessary in a 'jacket poultice' of flax-seed meal, which is carefully attended, and always kept warm and fresh. In many cases wine of antimony was given in minute doses of six to eight drops every hour."

The work will be found quite valuable both to the physician and surgeon.

DISEASES OF THE SPINE AND OF THE NERVES, BY CHARLES BLAND RADCLIFFE, M. D., F. R. C. P. London. John Netter Radcliffe, J. War-rington Begbie, M. D., F. R. C. P. Edinburgh. Francis E. Austin, M. D., F. R. C. P. and John Russell Reynolds, M. D., F. R. S., F. R. C. P. London. 8 vo. pp. 196. Philadelphia: Henry C. Lea; Cincinnati: R. Clark & Co.

This volume comprises a series of essays extracted from the "System of Medicine," edited by J. Russell Reynolds, M. D., on a group of diseases of great interest, and many of them of frequent occurrence. These essays are from the pens of gentlemen of acknowledged ability and experience, who have paid particular attention to the several diseases on which they have written. The volume will be found to present the latest advances in the knowledge of the several subjects of which it treats.

THE TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION, 1870, Vol. XXI. 8vo. pp. 612.

Although the meeting of the Association at Washington last year was marked by disgraceful occurrences, very largely because the presiding officer was highly inefficient, yet a great deal of good labor was done by the Sections, as is shown by the volume of Proceedings.

The volume contains a number of highly valuable essays. Among them are: "The Proper Treatment of the Insane, by Dr. John Curwen, of Pa.; Median Lithotomy, by James L. Little; New Operation for Imperforate Anus, by Dr. Thomas M. Healey; Form of Neuralgia of the Jaw Bones hitherto undescribed, by Dr. S. D. Gross; A New Mode of Amputation at the Ankle-Joint, by Dr. J. N. Quimby; On the Cellular Structure of the Red Blood Corpuscle, by Dr. J. G. Richardson; Intra-Uterine Injections and their Therapeutic Value, by Dr. J. G. Byrne;" etc. etc.

The Permanent Secretary, Dr. Wm. B. Atkinson, deserves great credit for the highly satisfactory manner in which he issues the Proceedings.

CIRCULAR No. 3 Surgeon General's Office, Nov. 23, 1870. Approved plans and specifications for post hospitals.

CIRCULAR No. 4. War Department, Surgeon General's office, Washington, December 5, 1870. A report on barracks and hospitals, with description of military posts. 4to. pp. 474

The reports contained in circular No. 4 are edited by assistant Surgeon JOHN S. BILLINGS, U. S. A. They are prefaced by an able and highly interesting letter to the Surgeon General by the editor. The object in their publication is: 1st, The preservation of interesting historical memoranda. 2nd, The presentation of all facts bearing upon the hygiene of the post, and the sanitary condition of the troops. 3rd, The furnishing such information as would be of interest to officers ordered to a post new to them. In addition, an idea is given of the general character of the barracks and hospital accommodations of the army.

In some valuable remarks upon ventilation the editor states that: "To secure the greatest effect from heat as a ventilating power, the fresh cool air should enter at the bottom of the rooms and the warm foul air pass out above. This will not, however, secure the satisfactory distribution of the air which is essential, for it is possible to pass a superfluity of air into and out of a room without properly ventilating it. The opening for fresh, cool air should, therefore, be near the ceiling in cold weather; but when fires are not used, a mechanical advantage is gained by having them near the floor, and both sets of openings should be inserted with tightly fitting doors, so that either can be used as required."

SATAN IN SOCIETY. By a physician. Cincinnati and New York. C. F. Vent. 12 mo. pp. 408.

Our readers, as well as ourself, will no doubt be startled by the title of the book before us, and will wonder what it treats about. The *apologia* says that its object is to expose the vices of the age and the consequent danger of the nation. The contents show the following subjects to be treated: Education and Training of boys and young men; Education and Training of girls and young women; Male Masturbation; Female Masturbation; The Sacred Rights of Offspring; The Physiology of Marriage; Prostitution; Happiness in Wedlock, etc.

A sensational work of the kind undoubtedly will have a large sale among the masses. While it undoubtedly contains a great deal of useful information which will be of benefit to those who will make use of it, yet we think the knowledge it contains is better imparted in some other manner, viz; by the study of anatomy, physiology, laws of health, in schools and at home—systematically studied, without omission of any department from any oversensitive delicacy. The great number of sensational works which have recently issued from the press may have the result of leading to means to properly educate the unprofessional upon subjects about which they are highly curious, and about which we think it will conduce to their welfare to know something

CHILDRENS' BOOKS.

Lee and Shepard's press of Boston, continues to teem with first-class publications for children of all ages. We have just received the series entitled "KATHIE STORIES," illustrated, consisting of KATHIE'S THREE WISHES; KATHIE'S AUNT RUTH; CEDARWOOD. They are by Miss A. M. Douglass, very interesting, and just the thing for little girls.

The SPRINGDALE STORIES consist of six books, 18 mo. about 175 pages, by Mrs. S. B. C. Samuels. They are entitled NETTIE'S TRIAL; ADELE: HERBERT; ERIC; ENNISFELLEN; JOHNSTONES FARM. Each book is a separate story, and makes the best of reading for little folks. The story of Eric, for instance, gives an account of his travels and of his friends on the continent of Europe. Many of the incidents described are actual facts, and the descent of Eric in diving armor, to the bottom

of the sea, will be found to possess some items which will be worth remembering. The finding of a box of gold and the lesson taught by Eric's honesty in trying to find the owner of the money, and its influence on his accusers, when he is unjustly accused of theft, will be worthy of attention to all who have a name to make.

The other volumes are equally as interesting.

LIGHT AT EVENTIDE is the title of a compilation of choice religious hymns and poems, by Dana Estes, 16 mo. pp. 240. The editor has endeavored to bring into the series something of interest and profit to all the members of the family, from the youngest to the oldest. Many of the pieces are very beautiful. There is poetry from J. G. Whittier, Mrs. D. Mulock Craik, Louisa Reld Estes, Dr. T. Guthrie, Mrs. Stowe, Adelaide A. Proctor, and many other good writers.

ARTHUR BROWN, the YOUNG CAPTAIN, by Rev. Elijah Kellogg is a tip top book for boys, and all should read it. It abounds in adventure and exciting incidents; and, at the same time it has its moral. It is the first of the *Pleasant Cove Series*, to be completed in six volumes.

Editorial.

THE CINCINNATI HOSPITAL AND ITS MANAGEMENT PROVE A PSYCHOLOGICAL FACT.—We see exemplified in the management of the Cincinnati Hospital how little men are disposed to do justly when in power—how unscrupulously they will trample under foot the rights of others when the opportunity is afforded them, and there seems to be no danger of their being called to an account for their conduct. Much is said about man's intuitive moral sense, and appealing to it, in order to induce him to do right; but the presumption that he has anything of the kind is a great error. Whatever moral obligation he acknowledges he has learned to do so from experience—from observing that unjust conduct, or conduct that would bring harm upon himself under similar circumstances, which he ascertains by his intellect, brings with it a penalty of some kind. In this way he has framed for himself a code of ethics which his vanity causes him to believe he observes from choice, and has had its origin in his natural sense of right. But let the fear of the penalty of wrong doing be removed ever so little, and it will be perceived how regardless he imme-

diately becomes of right and justice. Old David understood pretty well his fellow man when he replied, on being given a choice of punishments for the sin of numbering the children of Israel: "Let us fall now into the hand of the Lord, for his mercies are great: and let me not fall into the hand of man." The old king knew well that with man, with no prospect of being called to an account for the use of it, power was right, and that it would be employed as heartlessly and cruelly as with the tiger—that no pity, no more than with the tiger, would ever touch the heart. God might remember mercy, but there was no hope of a fellow creature's doing so.

A few years ago a clique of doctors of this city, known as the Miami clique, commenced a medical college, which they called the "Miami Medical College," simply because the Chairs in the Ohio College were not given them, for the reason of their want of qualifications to fill them. They were publicly offered them if they would prove their fitness to fill them by concouring for them, but this they declined. About the same time the profession of Cincinnati were

becoming dissatisfied with the then monopoly of the Hospital staff by the Ohio College, and therefore seconded the Miamis in their efforts to overthrow it. At length the end was accomplished: a law was passed by the Legislature for a Board of Trustees, with power to choose a staff, without reference to the Faculty of the Ohio College. Now mark the trickery of the men composing the Miami clique. Having, in the meantime, abandoned their college in indecent haste to rush to fill the Chairs of the Ohio College, which had been tendered them during a temporary muddle of affairs, without being compelled to concur for them; and afterwards put out when the college had resumed its normal state for their incompetency, they set about fixing up a Board of Trustees for the Hospital (abounding in cunning although deficient in learning, for they have been too much engaged in scheming to study any), and succeeded in getting relatives, friends, etc. appointed on it. This accomplished, they had a majority of themselves appointed on the staff, and then, with a great flourish of trumpets and loud cackling on the part of their organ, the *Lancet and Obs.* they started another college—Miami College, No. 2.

Since members of the Miami clique have composed the majority of the staff, no appeals to them that they were unjustly monopolizing positions that others had a right to compete for has moved them. Although reminded of their contest in past years with the Ohio college, to break up its monopoly, and their professions at the time, that places should be awarded for superior merit fairly tested, they make no other reply than the indecent one, "What we have won by our shrewdness we intend to hold on to"—"get us out if you can"—"you fellows who are making all of this outcry should have been more wary while we were laying our plans"—"generosity, etc. is all very nice to talk about, but its practice is very unfashionable"—"sorry for you 'outs,' but get in by your 'wits'!"—"scheming is the word."

Now, these men who act in this manner and talk after such a style when privately approached, claim to be honorable, upright men, who would disdain to do a wrong. It is well known how their organ publishes them abroad as the *profession of Cincinnati*—the salt that preventeth the whole body from decaying, and yet who can help regarding them as only fit to be cast out and trodden under foot. David, no doubt, still regarded himself a saint after playing the robber in the case of Uriah's wife and murdering poor Uriah, considering the power he had to do what he did, justified him in doing it, until he was taught differently by Nathan being sent to him; so the men of the Miami clique, we presume, excuse themselves and will continue to do so until their power is taken away from them by means outside of themselves.

Some of our readers, no doubt, sometimes think that we do not fairly represent our Miami brethren, and the probability of being thus suspected has often made us hesitate in making the disclosures we have. But we can assure them that facts would justify us in saying more than we have; and if they would reflect a little on the conduct of men that has come under their own observation, they must admit we have at no time made any charges against any one that has improbability in it. If David, whose psalms are sung to this day to the great consolation of the pious, and who communed, as it were, face to face with the Almighty, could commit an adultery and a foul murder when he had it in his power—acting on the principle that "might is right"—and continue to regard himself a saint and show righteous indignation when the story was told him of the rich man taking away the poor man's only ewe lamb, we do not think that it is over-taxing the credulity of any one when we relate how such unregenerate men as some of the Miamis are, who have never entered a church since they ceased to be under the protection of their mothers, got themselves on the staff

of the Cincinnati Hospital by dishonorable means, to the exclusion of better men, and continue to hold their positions in spite of all appeals to their sense of justice, and snapping their fingers in derision when the inconsistency of their conduct with their former professions is pointed out.

It is painful to us to disturb the faith of any one in his fellow creatures, but we are the champion of the truth, and we must vindicate it under all circumstances, even though we may be charged with exciting scandal. *"May it please the judge, if the frauds exist, the man who wrote that sentence is just the man to stand in that place. Moreover, there is no surer sign of rottenness in any sect, body, or organization, than the appearance of greater horror over the making of an accusation than over the commission of the offense. As soon as we see 'scandal' become the greatest dread of a community, we may be sure that its morals are becoming muddled at their source."*

At the risk of making our article wearisome, we will cite the conduct of the trustees of the hospital as an instance that men possess no inherent sense of justice, but pursue it only under circumstances that tend to compel them to do so. In the case of the Miamis, it might be alleged by some opponents of our theory that some of them are coarse, vulgar fellows, of viciously acquired propensities, which have come to outweigh the natural instincts of right; but such an allegation will not hold good as regards the hospital trustees, for a number of them we know to be intelligent, cultivated men; and not only so—several of them make claims to piety, one or two even being clergymen, and yet we are sorry to say the aggrieved turn to them for redress with no better result than has followed any appeals to the Miami clique. Two years ago the trustees of a certain medical college, among whom were the Hon. E. D. Mansfield, LL. D., and several other gentlemen of learning and note, presented to the hospital Board a most respectful

petition, asking that the medical colleges be placed on an equal footing as regards the staff of the hospital, and pointing out the injustice, as all fair-minded men concede, of the present arrangement, by which one school monopolizes nearly the whole staff, while others had no representation at all, and the petition was treated with indignity and contempt—a reply not even being deigned. The outrage on the unrepresented schools, for to call it by any softer name would be but hypocritical cant, still continues, and will likely continue until some higher power puts a stop to it—no sense of justice or pious feeling of obligation of those controlling will ever do it. As in the whole history of the world the captive has been let go free through force, notwithstanding the vaunted influence of other means, so, when right is done in this case, it will be by force. Here, in Cincinnati, is a public institution, not private, built by the people not only for eleemosynary but educational purposes, handed over by the trustees to a clique to be run in their own interests. Not a single test of qualifications is set up, and the claims of all other schools which are equally as great, are entirely disregarded. Not only do no tests of qualifications exist, but men known to be unqualified are put on the staff, for no other reason than that they are members of the clique.

But we hear a very good man saying that "the unregenerate man, I know, has no goodness in him, but regenerated he becomes a new creature, and is under the control of moral influences." In reply we will say we are writing about the physical constitution of the *first birth*, and do not propose to enter into any theological disquisitions. We will remark, however, that, in proportion to the profession of piety of some of our trustee friends, is their seeming unwillingness to act fairly, and the difficulty there is in operating upon them by moral influences. Indeed, we have heard it remarked that the government of an institution, or any other kind

of government, should never be entrusted to such so-called pious men, for the reason that they do not consider whether any measure that may be proposed is just and right, and should be carried out on that account, but what will be its effects on their power and those of their friends. It is quite sure Christ himself discarded all such, opposing, as they did, every effort on his part for the good of the race. All men, it can be regarded as a rule, seek after power, and those who are doubly intrenched against any hindrances in its attainment by arguments about justice and injustice, are those who unite themselves together and resolve, "1st. The righteous should rule; 2d. We are the righteous."

But we will dismiss the subject for the present, having no doubt that, on reflection, our readers will agree with us, that man has no *intuitive* sense of right, but that the feeling is altogether an acquired one, from the experience that wrong doing, sooner or later, brings with it a penalty. "Let us imagine the first appearing idea in the infant's mind to reach outwards, and to leave, as it will do, a residuum in its nervous centre; when the idea occurs again, there will be a tendency to a similar reaction. Suppose, however, that the reaction causes pain to the child, and thereupon a second idea is formed in its mind, the reaction of which is opposed to that of the first. When the first idea appears again, it will, instead of reacting outwards at once, excite the second idea into activity, which is inhibitory or preventive. That is the simplest case of volition: the child has voluntarily refrained from doing something, or voluntarily done something else; and the impulse that has prompted the choice is not an abstract power, but springs from that fundamental property of organic element by which what is agreeable is sought, what is painful is shunned." This was said in regard to the formation of volition, but it applies equally as well to the formation of principles.

UNCONSCIOUS CEREBRATION.—

We commence in this number an article on this subject from *Macmillan's Magazine*. We are sorry that we are under the necessity, on account of its length, to divide it into two or three parts; but when we have printed the whole of it our readers can read it altogether.

The author seems to be of the opinion that science ere long will proclaim the dogma that "matter can think," but believes in the *separability* of the conscious self from the thinking brain.

SCRIBNER'S MONTHLY.—We have received the January number of this very excellent magazine, published by Scribner & Co. of New York, at \$3 a-year. Its articles are by the best writers and of the highest order. There is at the present time being published in it a highly interesting story, entitled, "Wilfrid Cumbermede," by Geo. MacDonald, which will well repay perusal. Mr. McDonald is not only a novelist of the highest order, but a poet, and the poet's beauties characterize all his writings.

FOR SALE.—We have just received from the proprietor, and have for sale, one of Dr. S. B. Smith's electro-magnetic machines, which our readers will find described in our advertising pages. We regard it as a very meritorious instrument.

We have also for sale a number of small compound microscopes, fitted with separable achromatic lenses of a quarter of an inch focal distance, the same as are used on Dr. Woodward's students' microscopes, which is admitted to be the best of its kind, giving a magnitude of 50, 150, and 250 diameters, with excellent definition. They are the cheapest microscopes we ever knew, and are as efficient as any microscope for all the purposes of amateurs, students and physicians. As we have one in constant use, we know them to be as represented. Price \$12. Address the editor.

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No. 3

VALEDICTORY ADDRESS.

By D. D. BRAMBLE, M. D., Professor of Descriptive and Surgical Anatomy in Cincinnati College of Medicine and Surgery.

GENTLEMEN OF THE GRADUATING CLASS:—In undertaking the honorable duty entrusted to me by my colleagues of addressing you on this occasion, I did not feel it incumbent upon me to decline the task on the ground of the difficulty of saying something new.

The purpose of a valedictory address is not the affording an opportunity of saying anything new, but of saying something that graduates, taking their first step in a new career, ought to hear, and which they may, perhaps, hear for the first time.

I propose to offer you some general remarks upon the relations of medicine to society at large, in order that you may more clearly appreciate the position you are about to occupy, and be led, I trust, seeing the height and extent of the mission on which you are embarked, to pursue your professional studies in a liberal and generous spirit.

You have now acquired that theoretical and practical knowledge of the healing art which is necessary to enable you to enter upon the duties of practitioners of medicine with comfort to yourselves and advantage to those who may put themselves in your hands.

To simply discharge conscientiously the implied contract into which you enter with your patients, to do your best for their relief in return for your fee, is to do nothing more than is expected in every commercial transaction.

If nothing more than this were done medicine would hardly

rise above the level of a trade. This is not the way in which medicine has been served by those illustrious men who have raised their calling to a foremost place in the rank of professions; they have created an estate of honor and authority with mankind, which *you* and all of us inherit, and which we are in duty bound to transmit to our successors, at least unimpaired if not augmented.

Gentlemen, you have been to-night admitted to the medical fraternity. You will also remember that from this time you come into possession of that inheritance, which the genius, the philanthropy, and the devoted industry of others have accumulated. You are also placed in the enjoyment of a status in society, and of a consideration among your fellow-men. We trust that you will ever endeavor to sustain the credit of the noble fraternity which has thus adopted you.

Now, in order that you may do this, let us examine the field in which we are engaged to work. Our special object is the cultivation of the sciences of matter and life. These constitute the basis of medical knowledge. They also serve a very important part in training the powers of observing and judging. However, the study of these sciences does not exclusively belong to the domain of medicine. But it is certainly true that those who have been the most successful promoters of these sciences have always been found amongst our profession.

Our *art* consists in the application of a knowledge of life, and of the influence of matter upon life.

We are physicians; we stand at the head of the students of nature. As physicians, we command the respect and affection of the illiterate for the benefits that attend upon our professional ministrations. As students of nature, we are brought in friendly contact with every society and every individual engaged in the pursuit of natural truth. It is impossible for us to study our patient, MAN, without observing and learning much that must remain hidden to others concerning the healthy and disordered manifestations of his mental existence.

Our studies and our practical pursuits bring us into relation with all grades of society, and thus make us the golden link that binds all classes and all nations into one harmonious family. Our study is the truth of nature. Our object is to allay misery, to mitigate suffering, to advance the physical and moral well-being of mankind.

When we look upon a suffering being, our first and constant thought is to unravel the mystery of his affliction—to ascertain the cause of the disturbance of health. Our object is to understand the effort and action of nature in baffling the influences under which she is laboring. We seek to aid her in the conflict; we observe and follow her laws. If we turn aside from this path, we shall surely miss our aim and fail to benefit our patient. We are thus constantly taking nature as our guide, and as such we must learn to properly interpret her.

The labors of the physician enliven and direct his study. He seeks truth, not to contemplate her charms. He seeks truth not for her own sake, but for that knowledge which is power—the power of working good for his fellow creatures.

Here we may ask what other profession is there whose pursuit is truth untarnished—whose pursuit is truth for the sake of beneficence? If such a profession exists it must be that of religion.

But we perceive that, whilst the physician may enliven his faith, and gather fresh evidence of the eternal truth by examining the works of the Creator, the theologian is either limited by the contemplation of revealed religion, or, if not thus satisfied, he is probably bewildered amidst the mazes of mystic speculation and sectarian controversy.

The lawyer does not always seek the truth. We find him alternately defending right and wrong.

In natural science we do not have to choose between fallacious evidence and speculation. When we are in doubt we turn to the ever-open book of nature; here we find testimony that may be cross-examined and verified by all. For example: if two anatomists differ in their description of an organ, a third anatomist does not waste his time in weighing and balancing the statements of the combatants; he proceeds at once, instructed by their experience, to re-examine at the original source. And here, gentlemen, permit me to impress upon you the necessity of pursuing a like course.

When you read one account of a disease in one book, and a different one in another, both may be wrong. Never yield to the temptations of controversy; for, notwithstanding our immeasurable advantage in having the standard of nature to appeal to in our disputes, we have controvertists amongst us. If you think

you have discovered some new fact or law, and your position is attacked, as it is pretty sure to be, do not reply or defend it by arguments or pleadings. Be assured you and your opponent will never settle the matter by talking or writing; but humbly and patiently question nature again, and appeal to her testimony, whether it be for you or against you.

Our profession consists in the pursuit of truth, and the practice of benevolence. Error and disease are the only enemies that we combat. We enter into no compromise with evil, and the good we do for one fellow-creature does no injustice or injury to another. This cannot always be said of the lawyer, for not infrequently his most brilliant efforts are made to suppress truth, and thus gain his client's case at the expense of his opponent.

Nor can it be said by the soldier, who receives his honors in proportion to the victories he has won—that is, in proportion to the victims he has slain. Again, the manufacturer cannot always say it, for many times his articles are made at the sacrifice of the health of his employees.

The life of the practitioner of medicine is, or should be, one continuous effort to counteract the life invading influences that men raise against each other. True, all that is born must die, nor can we prevail against nature's inscrutable laws. A very large proportion of those who perish, succumb to causes, more or less dependent upon the cupidity and ignorance of man.

And the panoramic views of imagination, though they have been faithfully drawn, fade, even as the glow of sunlight beyond, and you behold a reality before you.

It may be the rose of consumption, engendered by the folly of parents, or a cramped or overshadowed dwelling, or insufficient and bad food, or deprivation of pure air, the sweet gift of nature, and the blood's reoxygenator. Another may be burning with a violent fever, whose "calor præternaturalis" seems as though it would burn life out of existence, engendered from malaria or exposure to night air, or severe frights, that so shock the nervous system as to prostrate them with fever. A third may have a fractured limb, or some other injury, which, benevolence directed by science, might have averted. On the field of battle we have to ~~avert~~ or quell the diseases that spring from ignorance and neglect, as well as repair the injuries inflicted by

the destructive implements of war. A fourth presents a far different character, where mind and body are both destroyed by that great social evil termed intemperance, or the indulgence of drinks, whose use is abuse. It destroys the energies of the mind, and prostrates the body with disease and delirium, rendering man a terror to himself and family, destroying that noble throne of intellect, the brain, and bringing to naught that reason and intellect, that once beautified this noble throne, now in ruins.

Whether reason or accident have made a man a physician, we find fewer desertions from our ranks than from those of almost any other profession.

The varied scientific knowledge acquired by the student of medicine, the extensive intercourse he enjoys with the world, and the migrations to every part of the globe, which the physician makes, seems especially to invite him to try the fortunes of a new career.

He rarely ever yields to the temptation to retire upon the *congesta cibaria*, to which the votaries of commerce and of law are so eager to succumb.

The physician mostly dies in harness. That love of knowledge which captivated him in youth, grows into a passion in old age.

The common incentive to labor, is the love of gain.

The husbandman tills the earth, the merchant toils at his desk, the lawyer pours over his brief, then the struggles in the forensic arena for victory; it may be over wrong—it may be over right.

With all these, the immediate motive to exertion is money. But we may safely affirm, that the truth of the maxim, *Labor ipse voluptas*, is by no one so thoroughly appreciated as by the physician.

In the pursuit of our vocation, we not only exult in the sense of healthy and honorable exertions, but we are gratified by the consciousness that we are extending the acquisition and enlarging the powers of the intellect.

What physician has ever felt the passion of discovery die within him, or that he had arrived at the limit of his capacity for doing good. In this lies the secret of that peculiar characteristic of our profession, the eagerness to work without pay.

This is why we see young men contest, with a vigor often at a loss pecuniarily, for the privilege of laboring gratuitously in our hospitals.

The medical man is always, and above all, a student.

Deprive him of the means of observing disease, and you render him unhappy; he is unhappy, because he feels that without the opportunity of observation the knowledge he possesses will decay, the faculties which are strengthened by exercise will grow torpid, the skill that is acquired by practice will be lost.

To-morrow you will go forth to become nature's observers, and your duties are legion, your obligations are binding, your home will be by the bed-side, not to seek the gold of Fortunatus, but to soothe the aching brow, and, forsooth, to give relief wherever you go. The diplomas you hold in your hands show that you are now incorporated in the noblest profession that can engage the attention of man! though often you will sit pensive and alone, imploring divine aid to guide you, when it may be that upon your expression hangs the destiny of the happiest, brightest maid that lives, and as the dark inuendo drops from your lips, so fades all that was lovely (when it should have been loveliest) never again to brighten!

Go then into the noble field of duty, and by faithfulness, discretion and honesty, procure for yourselves a crown whose beauty and comeliness will ever shine with its pristine brightness, even amid the fading splendor of eternity.

ABOUT DOCTORS.

By J. P. CHESNEY, M. D., Newmarket, Missouri.

The late enumeration of the population of the United States informs us that there are, within our borders, the enormous number of 74,000 persons essaying to make thin *pabulum vite* from the exercise of the prerogative of the physician. How many of this vast army—this "legion of leeches," as it has been not very inappropriately termed—belong to legitimate medicine? how many to the various humbuggeries which stalk over the land in our guise, there is no way to ascertain. Certain it is, however, that this fearful influx—2000 a year—into or hovering

on the borders of practical medicine, is slowly but surely exercising its baneful influence upon the whole profession. This is but obeying the same law which governs society in general, in this particular, namely: that over-crowding will inevitably produce a deterioration in both morals and intellect in those with whom it is persistently brought in contact; and the causes which operate to produce these effects are, in both instances, identical. Say what you will of the physician's motives for pursuing his calling, the money that there is in it is the incentive to *every one*, at least in this country. I know that there are many employments that are equally honorable; (very much more so indeed,) at which any of us might make more money, with even the same amount of physical labor; but, unfortunately, we are not convinced of this very important fact until we have gone too far to turn back with safety. You may argue half a year with most of our American youths, that being a doctor is no great thing, and particularly that there is but little money in it as a general thing, and you will usually fail to convince them. Hence, our two full regiments, sent into the field the first of every March. The mass of mankind is wholly incompetent to judge of a man's worth as a physician, and therefore every one who enters the calling, be his worth what it may, becomes the competitor of the most exalted intellects in the profession; and often, supplying with brass what he lacks in brains, he reaps the honor, (?) as well as the pecuniary rewards of the too modest gentleman. The matter, however, cannot always stop here, but the *worthy physician*, with starvation looking himself and family in the face, I have no doubt is often with humiliating reluctance *compelled* to resort to policies which his professional pride would carry him far above had he his choice.

The facts above spoken of do not constitute *all*, nor indeed the greater portions, of the difficulties to be encountered by the *gentleman* belonging to the ranks of physic; and I speak from a dear-bought experience, when I declare that the sleepless nights spent in the hovel of the wretched outcast, without hope of reward, eave perhaps base ingratitude—the sacrifice of my every participation in the social pleasures, which to intelligent humanity constitutes so much of the condition which makes existence desirable,—the mutual solicitude consequent upon my eternal accountability for the conscientious performance of my profes-

sional duties, *all, all* sink into nothingness, as a source of disquietude when balanced against the ungenerous discourtesies and down-right rascalities of many who figure as members of our calling. If these ill feelings only obtained between reputable medical men and the graceless quack, we might hope that the residue of the public, would still regard the "regular fraternity" as the veritable happy family we ought to be, and still concede to us the reputation of dignity and wisdom; but when we so far forget ourselves as to let our little animosities carry us and our warfare into the public prints—not only into our own scientific publications, where it would be hid from the scandal-loving general public, but also into the broad columns of the daily papers, side by side with the disgusting story fresh from the purlieus of vice, we may well exclaim "how are the mighty fallen!"

If these exhibitions of professional jealousy occurred among the half illiterate bores, of which country doctors are supposed to be so largely composed, we might not open so wide the eyes of astonishment; but when they find their actors among gentlemen of cultivation, occupying places where exalted merit only could have placed them—places, too, wherein they will not allow a student to enter, save with undoubted testimonials of character, the spectacle is the more humiliating.

Were these controversies originated in the pursuit of the solution of scientific problems, and conducted through the columns of the medical press alone, their authors might profit themselves, and also their readers; but when their disputations partake more of bellicose personality than of medical philosophy, readers at a distance from the scene of action are not usually very deeply interested, however those may be nearer home.

In glancing over medical matters of to-day, one cannot but be struck with the resemblance which they bear to Goldsmith's essay on Quack Doctors, toward the conclusion of which, he says:

"But as nothing pleases curiosity more than anecdotes of the great, however minute or trifling, I must present you, however inadequate my abilities are to the subject, with an account of one or two of those personages, who lead in this honorable profession.

"The first upon the list of glory is Dr. Richard Rock, F. U. N. This great man is short of stature, is fat, and waddles as he walks. He always wears a white three-tailed wig, nicely combed,

and frizzled upon each cheek. Sometimes he carries a cane, but a hat never; it is indeed very remarkable that this extraordinary personage should never wear a hat; but so it is, a hat he never wears. He is usually drawn at the top of his own bills, sitting in his arm-chair, holding a little bottle between his finger and thumb, and surrounded with rotten teeth, nippers, pills, packets, and gallipots. No man can promise fairer or better than he; for as he observed—"Be your disorder never so far gone, be under no uneasiness, make yourself quite easy, *I can cure you.*"

"The next in fame, though by some reckoned of equal pretensions, is Dr. Timothy Franks, F. O. G. H., living in the old Bailey. As Rock is remarkably squab, his great rival, Franks, is remarkably tall. He was born in the year of the Christian era 1692, and is, while I now write, exactly sixty-eight years three months and four days old. Age, however, has no way impaired his usual health and vivacity; I am told he generally walks with his breast open. This gentleman, who is of a mixed reputation, is particularly remarkable for a becoming assurance, which carries him gently through life; for, except Dr. Rock, none are more blessed with the advantages of face than Dr. Franks."

"And yet the great have their foibles as well as the little. I am almost ashamed to mention it. Let the foibles of the great rest in peace. Yet I must impart the whole. These two great men are actually now at variance; like mere men, mere common mortals. Rock advises the world to beware of bog-trotting quacks: Franks retorts the wit and sarcasm, by fixing on his rival the odious appellation of *Dumpling Dick*. He calls the serious Dr. Rock, Dumpling Dick! Head of Confucius, what profanation. Dumpling Dick! What a pity, ye powers, that the learned, who were born mutually to assist in enlightening the world, should thus differ among themselves, and make even the profession ridiculous! Sure the world is wide enough, at least, for two great personages to figure in: men of science should leave controversy to the little world below them; and then we might see Rock and Franks walking together, hand in hand, smiling onward to immortality."

Exchange the London of half a century ago, for the New York, Philadelphia, Cincinnati, Louisville, Chicago, or St. Louis of 1871, and how will the ex-Doctor's picture do? I am of the

opinion that the coloring is not spread one particle too heavy. Why our profession of all others should be the hot-bed of strife and ill-will among its members I am almost at a loss for a solution. We have a written code of ethics by which to regulate our conduct, and surely we ought to possess as many of the elements which go to make the *gentleman* as an equal number following any other pursuit. I do not believe the germs of professional discord originate in any other plasma, save that of the *respectable* portions of the profession alone, and to fully set forth my reasons for thinking so, I design, at some future period, to prepare a paper in which I may have room to elaborate the subject at greater length than the limits of the present paper would allow. In the meantime I hope our brethren every where will bury the hatchet of personal discord, and wield their trenchant blades, during the present year upon the common enemy of the human family—sickness in its ten thousand phases.

FOREIGN BODIES IN THE LARYNX.

By J. H. BUCKNER, M. D., Professor of Physiology in the Cincinnati College of Medicine and Surgery.

Read before the Cincinnati Academy of Medicine.

Mrs. G— of Ky. came under the treatment of Dr. Taliaferro and myself in November last.

HISTORY.—Age fifty-five, married twice, and has borne four children; menstruation ceased at fifty-three. Has never enjoyed very good health. About four years ago a slight cough, which she had had for several years, became suddenly very severe, coming on spasmodically, and continuing until she was completely exhausted. Anodynes gave some temporary relief, but the cough was the same when the effect of the medicine passed off. After a time her kidneys were affected, and she suffered great pain in the back and loins; there was frequent desire to micturate, and blood and mucus passed with the urine.

Under the treatment of her physician the severity of symptoms was relieved for awhile. The cough still continued, although the paroxysms were not so frequent. She again grew worse, and concluded to visit this city for advice. When she first came under our treatment her condition was truly deplor-

able. The severe paroxysms of coughing came on three or four times a-day; but her greatest distress was incontinence of urine. She said that for a few months prior to her visit to us, "the flow of urine took place at every coughing spell," but now it dribbled constantly, keeping her perfectly miserable. She had been considerably reduced in flesh by her sickness, but still was not emaciated. The urine presented the appearance of being mixed with milk and blood. After standing awhile, a thick, whitish deposit, constituting about one-third the whole mass, took place. This deposit proved, upon examination, to consist largely of the urates and phosphates, and apparently a small quantity of blood and mucus. Reaction normal; sp. g. 1030. Upon attempting to explore the bladder, Dr. Taliaferro discovered a stricture situated at the opening of the urethra, and another at the neck of the bladder. It was only after several efforts that he succeeded in introducing a small-sized sound. Mrs. G—— thought her kidney trouble, as she termed it, was the result of the severe cough; and if her supposition was not entirely correct, it was undoubtedly true that her urinary difficulty was much aggravated by it. Auscultation did not reveal to us any tubercles in the lungs, and the spasmodic character of the cough led us to conclude that it was asthmatic. Our patient was placed upon a stimulating and anodyne expectorant for her cough, and the stricture was gradually dilated.

A few days afterwards, during a severe paroxysm of coughing, she felt something in the mouth, which she supposed came from the windpipe; this was saved, and exhibited to us at our next visit. A small portion of this substance we here present to you for inspection under the microscope. Drs. Taliaferro and Carson have both made a microscopical examination, and pronounce it to be of vegetable origin. After expelling this substance, Mrs. G—— still had a slight cough, but its violence and paroxysmal character was entirely gone, and she expressed herself as feeling almost well. The stricture was now rapidly cured, and when she left for home she could retain her water for several hours, although there was still an occasional dribbling, which compelled her to continue to wear the urinal as directed by us.

Mrs. G—— was unable to recollect when she might have inhaled the foreign body, but thought it might have occurred

while renovating a straw bed, and its appearance, when first removed, indicated that it might have been a beard or capsule from some of the small grain: this case is an illustration of the difficulty in making a correct diagnosis in similar cases.

Before the invention of the laryngoscope the stethoscope was the only instrument used in physical explorations to determine the presence of foreign bodies in the larynx and trachea, but this, in numerous instances, gave no information.

The laryngoscope, however, has been to the physician as important and valuable aid in diagnosing obscure diseases of the air passages as the ophthalmoscope has in revealing deep-seated affections of the eye.

Several cases are recorded of foreign bodies in the larynx and trachea, the presence of which was unknown to the patient, and was not suspected by the physician until some accident, or an effort of nature, expelled the offending substance from the wind-pipe.

On page 408, vol. i. of the London *Lancet*, is mentioned the case of a boy admitted into the Samaritan Hospital, who was suffering with croupy cough. After an emetic of ipecacuanha wine he vomited up a cherry stone, and the cough was at once relieved.

An interesting case is given in the *Medico-Chirurgical Review*, vol. xxviii., taken from Porter's work on the Surgical Pathology of the Larynx and Trachea, etc. "Mr. Porter was requested to examine the body of a child who was supposed to have died from being thrown down from a gig, and from one of the wheels having passed over the chest; she had so far recovered from the accident that she walked home without assistance, although from the moment of the accident her cough had been croupy. These symptoms continued for thirty-eight hours, when she expired in a paroxysm of convulsive cough. On dissection the thorax and its contents were found uninjured, but on opening the larynx there was discovered part of an almond shell, its rough and broken edge entangled in the rima glottidis, and placed in such a manner that it effectually closed up the aperture for the transmission of air." The presence of any foreign body in the wind-pipe was not suspected in these cases, and their history very naturally suggests the conclusion that many cases of sudden and fatal croup, *as supposed*, were due to the presence of a foreign body in the larynx or trachea.

In the ordinary acts of deglutition the epiglottis is a faithful sentinel, effectually protecting the air passage; but any emotion, as surprise, anger, or fear, causing a sudden inspiration, will be likely to draw into the windpipe any foreign body which may be within the current of air; but small particles of dust and other light substances floating in the air may pass into the larynx during ordinary inspiration while talking. The experiments of Magendie upon inferior animals from which he had removed the epiglottis have seemed to indicate that this process was not absolutely necessary to protect the air passage in deglutition in these animals.

Baron Larrey, in his *Memoirs of Military Surgery*, mentions the case of a soldier who was wounded at Aboukir, in Egypt, 1801. The ball entered at the angle of the jaw, passed obliquely across the throat, and out at the opposite side of the neck. The base of the tongue was split, and the epiglottis was cut off, spit from the mouth, and showed to the surgeon who came to his assistance. When he first attempted to swallow he was seized with a convulsive cough, attended with vomiting."

Larrey succeeded in introducing an œsophageal tube, by which the man was nourished until the wound healed, after which he was able to swallow properly prepared food without the aid of the œsophageal tube. This case is reported in Prof. Flint's work upon physiology, and the accident is reported to have occurred to Gen. Murat, but this is evidently a mistake, as Larrey mentions the case as being without precedent. He also reports in the same chapter the case of Gen. Murat, who received in the same battle a somewhat similar wound, but does not mention the removal of the epiglottis in his case. "The ball entered at the angle of the jaw, penetrated into the mouth, removing a portion of the masseter muscle, and going obliquely backwards and downwards, it probably injured the ninth pair of nerves. Deglutition became very difficult, and the voice hoarse and interrupted." I take occasion to mention these two cases in order that a slight mistake in history may be corrected.

Larrey's case, and other cases reported by Prof. Dalton and Flint, indicate that although the epiglottis is essential, it is not absolutely necessary to prevent the passage of foreign substances into the larynx.

"Some of the conclusions arrived at by Dr. Krishaber in the

study of deglutition by the aid of auto-laryngoscopy, as presented in a note to the French Academy of Sciences, in July, 1865 are: 'In gargling, the larynx being widely open, a large quantity of liquid finds its way into the vocal organ.'

"An alimentary bolus may be tolerated in the larynx as far as the vocal chords, and *even in the interior of the trachea.*

"The sensibility of the trachea to the impression of foreign bodies is infinitely less than that of the larynx.

"Hard and cold bodies, as, for example, a sound, are not tolerated in the respiratory passages; while any soft body, which can adhere to the mucous membrane, and has a temperature like that of the parts touched, is easily tolerated in the respiratory passages, and kept in the trachea many minutes without producing the slightest cough." *

Professor Flint very truly remarks that these conclusions are opposed to common experience. If, however, a foreign body be fairly lodged in one of the laryngeal ventricles, it has been known to remain there for many years without much inconvenience. The same may be said when it is fixed low down in the trachea, or in one of the bronchi; † but even in such instances the life of the patient is in great danger. If inflammation does not ensue, the foreign body may be displaced at any moment, and, by moving up and down the windpipe, or by passing into the lungs, produce convulsive cough and death.

As the laryngoscope will enable the physician, who is expert in its use, to determine the presence of a foreign body in the larynx, and even, in some instances, as far down as the bronchi, in suspected cases, it becomes an important question as to the propriety of an operation for its removal. I think most surgeons will agree with me in the suggestion, that whenever the body is known to be hard and uneven in its surface, or of such size and character as to endanger life should it be dislodged and pass into one of the bronchi, and its situation has been determined by the aid of the laryngoscope or other means, then an operation for its removal should at once be performed, *although at the time it may not be causing very great distress.* In those cases in which symptoms of suffocation are impending, the propriety of laryngotomy or tracheotomy at the earliest possible moment has already been established.

* Flint, Physiology.

† Porter.

MEDICAL GLEANINGS.

CHANGE OF LIFE.—Dr. Tilt was able to confirm the general belief that the change of life is a perilous period for those women who enter it in a state of disease; particularly if they be suffering from any uterine affection. Not only are uterine affections, then made worse, but they prolong the change, and retard cessation. He also confirmed the belief in the powerful help that the menopause brought in aid to medicine to enable us to cure cases of intractable chronic uterine inflammation, and to prevent uterine displacements being any longer a fruitful source of painful symptoms, although the displacements still continued to be almost as great as before the menopause. After reminding his hearers that heteromorphous growths became unusually frequent after cessation, Dr. Tilt sketched the influence of the menopause on those forms of uterine disease which had previously been so frequent: irritation, congestion, inflammation, and ulceration of the womb. He passed in review the diseases that had come under his own observation, in the order of their greatest frequency; and gave chronicity as their chief characteristic.—*Med. Times and Gazette*.

CHLORAL.—Dr. Parry stated, in the *Obstetrical Society of London*, that he had no experience of chloral in natural cases of labor; but during the past nine months had used it extensively in the puerperal state; especially in five cases of puerperal mania, and two of puerperal convulsions. In four of the five cases of mania its action had been very beneficial, while in the fifth it failed to produce sleep though given in full doses. In one case of mania the patient had no sleep for three days, though opium had been given; but within five minutes of taking half a drachm of hydrate of chloral she fell asleep for four hours, and again for five hours more. In another case, on the fourth day, it was given in full doses, and the next day the patient was quite rational. The chloral hydrate was very suitable for the restless sleepless condition not uncommon after delivery. A drachm dose produced no effect in one case of convulsions, while in another, in which the paroxysms were severe and frequently repeated, the action of the chloral was very marked.

Dr. Heywood Smith also took a favorable view of the action

of chloral in puerperal affections. He narrated a case of puerperal peritonitis with vomiting, in which he had given sixty grs. repeated in three hours, with the best effect.

Dr. Playfair said he had found chloral of the greatest value, but thought that it was somewhat unsafe to give it in such large doses as sixty grains, repeated in three hours. He mentioned a case of puerperal convulsions in which it had acted admirably, but in which the patient eventually sank, and said he was unable to divest himself of the fear that the chloral, which had been given freely, might have had something to do with it.

FIBROMA UTERI.—Dr. Little exhibited to the *N. Y. Pathological Society* a uterus removed from a married female patient, aged twenty-three, who had died the day previous to the meeting at Bellevue. In January, 1868, she was caught, during her menstrual epoch in a rain storm, and the flow was, in consequence, temporarily arrested. The attendant pain and inconvenience were relieved by a hip-bath, etc. etc. Three months after this she probably miscarried. She presented all the usual symptoms of ovarian disease on her admission, but three days after was seized with uterine hemorrhage, which ran her into such a typhoid state as to preclude the possibility of any careful uterine examination. She gradually sank and died, and during the last two or three days of her life she passed from the vagina some ragged degenerated material, which at the autopsy was found to fill the uterus, much enlarged in consequence. There were evidences of peritonitis in the neighborhood of the womb. Dr. L. was of the opinion that the mass was a degenerated fibroid. By request the specimen was referred to the committee on microscopy.

EXPERIMENTS OF DR. BROWN-SEQUARD.—Dr. Brown-Sequard publishes a paper in the *Lancet* of the 6th ult., calling attention to his recent experiments on the effects of injuries of the brain on the lungs. He finds injuries to the base of the brain followed by hemorrhage, cedema, emphysema, etc. of the lungs. He says: "When I publish the details of my experiments on the influence of injuries to the brain on the lungs, I will show that, in man, diseases of, or injuries to, the brain very frequently produce organic alterations in the lungs. I will content myself here to prove the frequency of that morbid influence of the brain on the pulmonary organs, to state that, out of 188 cases of organic

disease of the brain, recorded by Calmeil, there was a morbid state of the lungs, especially inflammation, in more than sixty cases—i. e. in one case out of three. I have no doubt that many patients attacked with brain diseases die from a disease of the lungs caused by that of the central organ of the nervous system.

BROMIDE OF POTASSIUM IN ITS EFFECTS ON CHILDREN.—E. Montard Martin, of the Beaujon Hospital, France, reports a number of cases to show the effects of this drug on infants and small children. It is invaluable in all cases of dentition, where there are aggravating nervous symptoms, and it is improper to give opium. In sleepiness of infants, in cough purely spasmodic, he gives it in doses of three-quarter grains once or twice a day, to children from three months to a year old. In purely nervous cough it is equally indicated; but it should not be given in diarrhea, as it increases this difficulty. In excessive erethism of any sort, and especially in those cases of boys where there is almost constant erection of the penis, it works most happily.—*Richmond and Louisville Medical Journal.*

FEMALE DOCTORS.—Prof. Dickson, of Jefferson Medical College, in his introductory lecture, uses the following language: "The list of Female Colleges has become a large one. Their classes are every session growing more numerous, and the reputed success of several regularly educated ladies as practitioners, will doubtless crowd their lecture-rooms. Far be it from me to deny or seek to limit their evident liberty of choice. I question neither their rights nor their capacities: they are fully able to fill most, if not all the positions they seek to occupy; and it will be well for you hereafter, if you do not find them too strong for you in the great battle of life. Meanwhile, however much we may regret, disapprove of, and deprecate this lamentable misapplication of their eminent gifts and graces, they must receive at our hands all kindness and courtesy, every aid and facility; nothing being refused them but the worst and useless privilege they have so tenaciously contended for—the admission, namely, into the same rooms, at the same hours with their brothers and cousins, their future lovers and husbands."

PARTIAL PARALYSIS FROM IRRITATION OF GLANS PENIS.—Prof. Sayre cites a number of cases of partial paralysis of the exterior muscles of the legs, connected with other pathological conditions,

occurring in lads, and traceable to reflex irritation originating in the glans penis—the contraction of the prepuce, or its adhesion to the glans, giving rise to the accumulation of smegma. The slightest touch was often sufficient to provoke painful erections. In one instance the legs were flexed at an angle of forty-five degrees, and tenotomy would have been performed but for the fortunate discovery of the origin of the difficulty. By circumcision, or by slitting the prepuce, and tearing loose its adhesions, if any, cures were accomplished in every instance.—*Pacific Medical and Surgical Journal*.

TOOTHACHE DROPS.—Take tincture of aconite root, tincture of opium, chloroform, carbolic acid, each one fluid ounce; oil of cloves, half a fluid ounce; alcohol, one and a half fluid ounce. Mix.—*Pharmacist*.

TREATMENT OF TYPHOID FEVER.—**DR. E. Shedd** says, in the *British Medical Journal*, that great success having attended his treatment of typhoid fever, he has thought that possibly a few remarks may not be without interest.

As soon as there is any tenderness in the abdomen upon pressure, I prescribed drachm doses of glycerine, (in the case of an adult,) to be repeated three times a day. Under this treatment, the temperature gradually subsides, becoming normal towards morning, and rising to 90 degrees towards evening. The secretions soon improve; a profuse perspiration frequently prevails; diarrhea is quickly checked; and the patient becomes convalescent.

Of the numerous cases which have come before me in my practice, I have treated 27 in the manner described, and with complete success, as not a single death has occurred—a fact which, as it seems to be, is the more remarkable, as I have much reason to believe that the disease has been of a more virulent type than usual, because I find, from my own observations, and the information of others, that fevers of the typhoid class have been this year more than usually prevalent.

TREATMENT OF CHOLERA INFANTUM.—I know of no remedy which is better retained, and puts a stop to vomiting of cholera infantum sooner than often repeated teaspoonfuls of mint julep. Cold water and ice ought to be allowed *ad libitum*, and no regard should be paid to their immediate rejection by the stomach, for

the soothing effects obtained, and the relief they give will soon become apparent. Sinapisms and irritating embrocations to the epigastrium I consider worse than useless. From two to five grains of the subnitrate of bismuth every two hours, will be soon retained by a child under two years of age. The property of bismuth, of adhering tenaciously to mucous membranes, makes the drug very serviceable as a topical sedative, besides the constitutional medicinal effects which it is believed to exercise on irritated and congested mucus surfaces.

When emaciation begins to show itself, the mild ferruginous preparations, as first recommended by Dewees, can safely be given, I give the preference to the following prescription :

R Ferri et Ammoniac Cit., ʒss.
 Tr. Columbæ,
 Tr. Nucis Vomicae, } aa gttss. xxx.
 Sacch. Alb., ʒiij.
 Aquæ, ʒiij. M.

Sig.—Give a teaspoonful three times, daily, for a child between one and two years of age.

Frequent tepid baths, and persistent sponging of the head and abdomen, when these parts show any increase of heat, do excellent service.—*N. Y. Medical Journal*.

IDIOPATHIC MYELITIS.—Dr. Oxley, of Liverpool, mentions a case of idiopathic myelitis, in which the patient, a boy of eleven, had pains commencing in the small of the back round to the umbilicus. The pains were worse at night; micturition frequent; walking gave great pain; pulse 120; bowels costive; skin red over lower dorsal vertebræ, priapism and incontinence of urine was followed by paraplegia and anæsthesia, extending to seventh intercostal space. Bed-sore over sacrum and trochanters. On *post mortem* examination, inflammatory lymph, extending over lower portion of spinal cord, was found. Nothing abnormal was observed on laying open membranes, but a longitudinal incision of the cord showed white softening for half an inch, opposite fifth dorsal vertebræ, and on section whitish fluid exuded. The bladder, firmly contracted, had an abscess at its upper part. Ureters much dilated, and pelvis of kidney enlarged and ulcerated.—*National Med. Jour.*

CURE FOR BURNS.—Dr. Ferguson recommends as an infallible

cure for burns and scalds the following: Glycerine, ℥v; white of egg, ℥iv; Tinct. arnica, ℥ij.

Mix the glycerine and white of egg intimately, and then add gradually the arnica. Apply freely on linen rags night and morning, washing the scald previously with warm castile soap suds.

ARSENIC IN IRRITATIVE DYSPEPSIA.—Dr. Thorowgood recommends arsenic as a remedy in irritative dyspepsia. According to this writer, the small irritable tongue, with projecting papillæ and yellow or gray fur, indicates arsenic, vomiting and burning pain also point to the use of this drug. The dose must be a very small one, say one drop of Fowler's solution, and if this does good, on no account should the dose be increased in hope of forwarding the cure. Whether the medicine be given before or after meals does not seem an essential matter, but the preference is rather in favor of its use before the food. The rule has been to give the patient half an ounce of the infus. calumba alone three times a-day for a week, and then add the drop of arsenical solution.

PROGNOSIS IN MENTAL DISEASES.—There is much reason to believe that the grade of intellect is a very important element of prognosis. If accurate statistics on this point were possible, they would show, I am inclined to think, that, *ceteris paribus*, patients with good intellectual endowments recover, in larger proportion, than those less happily constituted. I have no theory on the subject, but all the analogies of physiology seem to warrant the opinion, that the greater the energies of the mind, the greater would be its recuperative powers under the stroke of disease. It is certainly a significant fact that, in a large proportion of cases, the men of world-wide renown who have been smitten with mental disease have recovered their reason.—Dr. RAY, *Amer. Jour. Med. Sciences*.

MICROSCOPIC EXAMINATIONS.—The air of printing offices contains minute particles of metal, particularly antimony. Dust taken from a rafter eleven feet above the floor of a printing office was analyzed by Professor Sullivan, and found to contain antimony but no lead.

The air of a hair dressing room contained scales and minute hairs. In rooms where the machine brush is used the amount is increased.

The air of the dissecting room contained fragments and fibers

with the mark of the dissecting knife upon them. They were fibrils of muscles, yellow and white fibrous tissue, some cells, scales and corpuscles. The air of stables was found to contain moth scales, a few spores, hairs and fragments tinged blood-red.

Tobacco smoke, examined by the microscope, was seen to hold little globules of nicotine twirling and flitting about in it. The statement is made that some remained on the walls of the mouth; when the smoke is breathed (by novices) more globules are retained in the lungs, and nausea and illness supervene. These globules, if found in the air distributed by a tobacco smoker, might be taken for germs.

MEMBRANOUS CROUP: TRACHEOTOMY.

By F. GARRETSON, M. D. Read before the Baltimore Pathological Society.

On Tuesday morning, December 6th, 1870, I was called to see a little girl aged about 20 months, ill with "membranous croup" since Saturday. Dr. Cockrill and Professor Miltenberger had seen the child, and had given a highly unfavorable prognosis on Sunday. Finding the patient much exhausted by the continued labor of breathing through the contracted air passages, and evidently dying of gradual asphyxia, I made some changes in the treatment, which were endorsed by Professor Miltenberger in a consultation at 7 P. M. At my first visit I advised tracheotomy, and the father, who is a physician, consented, but the mother and female relatives objecting, and Professor M. declining to urge it, though expressing no hope of a cure by other means. I remained with the child all night, to watch the effect of the remedies agreed on. There was nothing worthy of note in the case or the treatment. The occlusion of the trachea steadily progressed, and at 8 A. M. on Wednesday, December 7th, I sent a message to Doctor Van Bibber, who kindly lent me his case of instruments for the operation of tracheotomy. The child was now sinking so rapidly that the mother and her friends joined in urging me to operate; I consented, but told them that only temporary relief was to be expected. Dr. Rusk was summoned, and with his kind assistance, I opened the trachea at 9.15 o'clock, and inserted the double canula. The child seemed to be *in articulo mortis* when this operation was done, but soon began to breathe freely, and then sank into a quiet sleep, interrupted about every half hour by the necessity of expectoration, as mucus accumulated in the bronchial tubes. After three hours of repose, the little patient awoke much refreshed, took liquid food

with ease and avidity, and seemed so much relieved as to inspire hopes of recovery in those who saw her. But after twelve hours of comparative comfort, the expectoration became more frequent, and less effectual, as each succeeding effort left the child more exhausted, and she finally died of suffocation about midnight, fifteen hours after the operation.

I have not given in detail the symptoms or the medicinal treatment of this case, because there was nothing peculiar or instructive in either; the symptoms were simply those of gradual asphyxia for three days, during which time the long-tried and approved remedies, directed by Professor Miltenberger, seemed to fail in retarding the steady progress of the disease to a fatal termination.

The operation presented nothing of peculiar interest. It was done as low as possible, in view of the uncertain extent of the false membrane in the trachea; the dissection was done rapidly, as the patient was *in extremis*, and the trachea was opened while there was still some venous bleeding, but this ceased with the establishing of free respiration, and gave no trouble.

The result of the operation in this case does not affect any estimate of its value and propriety in "true croup," but suggests a few remarks upon the proper time and manner of applying surgical treatment to that disease.

A review of many authorities shows me that under every plan of medical treatment so far employed, the mortality in "diphtheritic croup" largely exceeds one half the cases. I have collected from the reports of American, British, and Continental Surgeons. 150 cases of tracheotomy in "true croup" in which 82 deaths and 68 recoveries occurred: that is, 45 per cent recovered after the operation, which is a better result than is given by the cases in which medical treatment alone has been used. Now all experience has proved that the chances of success in tracheotomy for croup diminish rapidly with the delay in doing the operation: and in a large majority of the cases referred to, it was done as a *dernier ressort*, when all other means had failed. It is evident that when the patient is *in extremis*, and tracheotomy is performed as a last resort, it is not just to ascribe to the operation the fatal result already regarded as more or less certain without it. And the fact, that in more than half of the cases recovering after the operation, it was done when there was no hope of saving life by any other means, must have great weight in our estimate of its value, as compared with medical treatment alone.

Admitting the propriety of the operation in croup, what are the indications which determine the best time for it? Here the judgment of the physician is shown in deciding, from the prevailing character of the disease, the condition of the patient, and the progress of the case, the time when the operation is neither unnecessary from being performed before milder means have

been fairly tried, nor useless, from being delayed till the chances of life are reduced to a minimum. The best authorities agree that it should be done as soon as urgent symptoms of asphyxia appear, if they are not properly relieved by medical treatment. But, in view of the results obtained by operating in *extremis*, I should not be disposed to see a patient die of membranous croup without the benefit of the chance for life offered by the operation.

There has been some discussion as to the use of chloroform in tracheotomy. When death is approaching by asphyxia, the surface is cold and the skin blue or livid, showing carbonization of the blood, in this condition the anæsthetic would be dangerous, and is not required, as the patient is usually insensible, and the movements are easily controlled. But in impending death from sudden suffocation, the blood being little altered, and the motions violent, chloroform is admissible, and facilitates the operation.

Passing over the points to be observed in performing tracheotomy, and the unsuccessful attempt of Bouchut and others to substitute catheterism of the larynx for that operation, I will conclude with a few remarks upon the means employed to secure the free admission of air, after the trachea is opened. So far as I am aware, the only method in use is the introduction of a tube into the trachea, and the most approved form of instrument seems to be the canula, composed of two curved tubes, the one sliding easily within the other. The advantages of this instrument are obvious, as compared with any form of single tube, but it seems to me liable to certain objections.

First. I think that the presence of a tube in contact with so large a surface of the tracheal mucous membrane, and causing more or less friction upon it during the movements of respiration, is likely to excite injurious irritation and increased secretion.

Second. The interior diameter of the tube being much less than that of the trachea, it increases by so much the effort required for respiration, and the tube is liable to sudden occlusion by the secretions.

Third. The trachea is so far closed by the tube as to cut off free communication between the lungs and the larynx, which is desirable, for obvious reasons; nor does the canula admit of topical remedies, which I think might often be applied with advantage, above the opening.

These objections I propose to obviate, in some degree, by simple dilatation of the opening by means of broad, flat silver hooks, having an *elastic* band permanently attached to the shank of the one, and fastened by a buckle to the other. I am indebted to my friend, Doctor Thomas J. Weedon, for suggesting the use of an elastic band, which would yield to the respiratory movements, lessen the friction of any apparatus used, and render it

more secure from displacement than if retained by the usual tapes.

The proper forms to be given to the hooks I need not here discuss, as my object in suggesting such an apparatus is simply to obtain information from the Society, as to how far such a method of treatment has already been tested, and an expression of opinion as to the relative advantages of simple dilatation by some such means as I have mentioned, as compared with the use of any form of canula.

EXSECTION OF THE CLAVICLE—DEATH ON THE SIXTH DAY.

By PAUL F. EVE, M. D.

Joseph Smith, a lad in his twelfth year, coming from near Princeton, Kentucky, was brought by his mother to my office on the 21st of December, 1870. He was a pale, feeble boy, presenting a large tumor, involving nearly the whole left clavicle. Its cause was unknown, and its origin dated about fourteen months back. Where it sprang from, what portion of the clavicle was first attacked—if, indeed, it commenced in that bone, as we supposed—could not be ascertained from himself or mother, who alone accompanied the patient.

The tumor was nearly four inches in diameter by measurement, projected chiefly forward and upward, could not be circumscribed at its internal edge by the fingers, presented an irregular, nodulated surface, and felt quite hard in its structure. The pain, too, had now become very acute, and the system, as we have observed, much affected by the disease.

In consultation, the next day, with Drs. Briggs, Buchanan and others, it was decided to make an explorative examination. and the fine trochar, or needle, revealing nothing but blood, excision of the entire collar bone, now believed to be degenerated into chondroma, was performed before the class. Its acromion end was easily disarticulated, after a long incision over the diseased mass; then by severing its intimate and broad attachments below, the bone was separated from the sternum. In dissecting the bone out of the neck, it was found to have involved the lower cervical glands, and the external jugular vein was divided twice. The hemorrhage was not profuse; five animal ligatures were applied, including two to the vein mentioned. The wound was dressed with a bat of cotton, soaked in a strong solution of carbolic acid. The patient rallied slowly, but well, from the operation, and was taken to the house of a relative, over a mile distant.

During the after treatment of six days he survived the operation, he took about two grains of morphine, one aperient dose.

and two mild injections. His appetite never revived; a little milk, some apple scraped to a pulp, a few batter cakes and water, were about all he could be induced to take. The fourth day he passed two live worms, and another the night before he died—the first, his mother says, she ever knew him to have. Refusing all stimulants, attempt was made to sustain him by nutritive enemata.

I thought he was doing pretty well up to the evacuation of worms, hoping every hour his appetite would improve. He complained not much of distress about the wound, which was kept wetted and dressed with carbolic lotion.

On the fifth day, owing to the distance, and the frozen condition of our streets, I could not get to him until late in the afternoon.

Of course death, in any event, was our prognosis in this case, but hopes were entertained that he would be able to reach home until the failure to prevent exhaustion of his strength, and its complication with worms.

The disease was enchondroma of the semi-malignant character, and had destroyed the whole circumference of the bone, and its length, to an inch and a half of its external extremity. Distinct crepitation can now be felt between the chondromatous and small healthy portions of the clavicle, by twisting the specimen.

UNCONSCIOUS CEREBRATION.

[Continued from Feb. No. p. 88.]

From Sounds to Sights the transition is obvious. An Apparition is to the optical sense what such a Voice as we have spoken of above is to the hearing. At a certain point of intensity the latent idea in the unconscious brain reveals itself and produces an impression on the sensory; sometimes affecting one sense, sometimes another, sometimes perhaps two senses at a time.

Hibbert's ingenious explanation of the philosophy of apparitions is this: . We are, he says, in our waking hours, fully aware that what we really see and hear are actual sights and sounds; and what we only conjure up by fancy are delusions. In our sleeping hours this sense is not only lost, but the opposite conviction fully possesses us: namely, that what we conjure up by fancy in our dreams is true, while the real sights and sounds around us are unperceived. These two states are exchanged for each other at least twice in every twenty-four hours of our lives, and generally much oftener, in fact every time we doze or take a nap. Very often such slumbers begin and end before we have become aware of them, or have lost consciousness of

the room and its furniture surrounding us. If at such times a peculiarly vivid dream takes the form of an apparition of a dead friend, there is nothing to rectify the delusion that what we have fancied is real; nay, even a background of positive truth is apparently supplied by the bedstead, curtains, etc. etc. of whose presence we have not lost consciousness for more than the fraction of time needful for a dream.

It would, I think, be easy to apply this reasoning with great advantage, taking into view the phenomena of Unconscious Cerebration. The intersection of the states wherein consciousness yields to unconsciouness, and *vice versa*, is obviously always difficult, of sharp appreciation, and leaves wide margin for self-deception; and a ghost is of all creations the one which bears most unmistakable internal evidence of being *home-made*. The poor unconscious brain goes on upon the track of the lost friend, on which the conscious soul, ere it fell asleep, had started it. But with all its wealth of fancy it never succeeds in picturing a *new* ghost, a fresh idea of the departed, whom yet by every principle of reason we know is *not* (whatever else he or she may have become) a white-faced figure in coat and trousers, or in a silk dress and gold ornaments. All the familiar arguments proving the purely subjective nature of apparitions of the dead, or of supernatural beings, point exactly to Unconscious Cerebration as the teeming source wherein they have been engendered. In some instances, as in the famous ones quoted by Abercrombie, the brain was sufficiently distempered to call up such phantoms even while the conscious self was in full activity. "Mrs. A." saw all in her vision camly, and knew that they were visions; thus bringing the conscious and unconscious workings of her brain into an awful sort of face-to-face recognition, like the sight of *doppel-ganger*. But such experience is the exceptional one. The ordinary case is, when the unconscious cerebration supplies the apparition, and the conscious self accepts it *de bonne foi*, having no means of distinguishing it from the impressions derived from the real objects of sense.

The famous story, in my own family, of the Beresford ghost, is, I think, an excellent illustration of the relation of unconscious cerebration to dreams of apparitions. Lady Beresford, as I conjecture, in her sleep, hit her wrist violently against some part of her bedstead, so as to hurt it severely. According to a well-known law of dreams, already referred to, her unconscious brain set about accounting for the pain, transmitting the sensation into an Idea. An instant's sensation (as Mr. Babbage, Sir Benjamin Brodie, and Lord Brougham have all illustrated) is enough to call up a long vision. Lady Beresford fancied accordingly that her dead cousin, Lord Tyrone, had come to fulfil his promise of revisiting her from the tomb. He twisted her curtains and left

a mark on her wardrobe (probably an old stain she had remarked on the wood), and then touched her wrist with his terrible finger. The dreamer awoke with a black and blue wrist; and the story took its place in the annals of ghost-craft forever.

Somnambulism is an unmistakable form of unconscious cerebration. Here, while consciousness is wholly dormant, the brain performs occasionally the most brilliant operations. Coleridge's poem of *Kubla Kahn*, composed in opiate sleep, is an instance of its achievements in the realm of pure imagination. Many cases are recorded of students rising at night, seeking their desks, and there writing down whole columns of algebraic calculations; solutions of geometric problems, and opinions on difficult cases of law. Cabanis says that Condillac brought continually to a conclusion at night in his sleep the reasonings of the day. In all such cases the work done asleep seems better than that done in waking hours; nay, there is no lack of anecdotes which would point to the possibility of persons in an unconscious state of accomplishing things beyond their ordinary powers altogether.

The muscular strength of men in somnambulism and delirium, their power of balancing themselves on roofs, or finding their way in the dark, are physical advantages reserved for such conditions. Abnormal acuteness of hearing is also a well-known accompaniment of them, and in this relation we must, I conclude, understand the marvelous story vouched for by the late Sir Edward Codrington. The captain in command of a man-of-war was one night sleeping in his cabin, with a sentinel as usual posted at the door. In the middle of the night the captain rang his bell, called suddenly to the sentinel, and sharply desired him to tell the lieutenant of the watch to alter the ship's course by so many points. Next morning the officer, on greeting the captain, observed that it was most fortunate he had been aware of their position and had given such an order, as there had been a mistake in the reckoning, and the ship was in shoal water, on the point of striking a reef. "I!" said the astonished captain, "I gave no order; I slept soundly all night." The sentinel was summoned, and of course testified that the experienced commander had in some unknown way learned the peril of his ship, and saved it, even while in a state of absolute unconsciousness.

Whatever residue of truth may be found hereafter in the crucible wherein shall have been tried the marvels of spirit rapping, mesmerism, and hypnotism; whatever revelation of forgotten facts or successful hits at secrets, is, I believe, unquestionably due to the action of Unconscious Cerebration. The person reduced to a state of coma is liable to receive suggestions from without, and these suggestions and queries are answered by his unconscious brain out of whatever stores of memory it may retain. What a man *never* knew, *that* no magic has ever yet enabled him to tell; but what he has once known, and in his

conscious hours has forgotten, *that*, on the contrary, is often recalled by the suggestive queries of the operator when he is in a state of hypnotism. A natural dream sometimes does as much, as witness all the discoveries of hidden treasure, corpses, etc. made through dreams, generally with the aid of the obvious machinery of a ghost. General Sleeman mentions that, being in pursuit of Thugs up the country, his wife one morning urgently entreated him to move their tents from the spot—a lovely opening in a jungle—where they had been pitched the previous evening. She said she had been haunted all night by the sight of dead men. Information received during the day induced the General to order digging under the ground whereon they had camped; and beneath Mrs. Sleeman's tent were found fourteen corpses, victims of the Thugs. It is easily conceivable that the foul odor of death suggested to the lady, in the unconscious cerebration of her dream, her horrible vision. Had she been in a state of mesmeric trance, the same occurrence would have formed a splendid instance of supernatural revelation.

Drunkenness is a condition in which the conscious self is more or less completely obfuscated, but in which unconscious cerebration goes on for a long time. The proverbial impunity with which drunken men fall without hurting themselves can only be attributed to the fact that the conscious will does not interfere with the unconscious instinct of falling on the parts of the body least liable to injury. The same impunity is enjoyed by persons not intoxicated, who at the moment of an accident do not exert any volition in determining which way they shall strike the ground. All the ludicrous stories of the absence of mind of tipsy men may obviously be explained by supposing that their unconscious cerebration is blindly fumbling to perform tasks needing conscious direction. And be it remembered that the proverb "*in vino veritas*" is here in exact harmony with our theory. The drunken man unconsciously blurts out the truth, his muddled brain being unequal to the task of inventing a plausible falsehood. The delicious fun of Sheriḍan, found under a tree, and telling the policeman that he was "Wil-Wil-Wilberforce," reveals at once that the wag, if a little exalted, was by no means really drunk. Such a joke could hardly have occurred to an unconscious brain, even one so well accustomed to the production of humor. As in dreams, intoxication never brings new elements of nature into play, but only abnormally excites latent ones. It is only a Porson who, when drunk, solemnly curses the "aggravating proprieties of inanimate matter," or, when he cannot fit his latch-key, is heard muttering, "D——a the *nature of things*!" A noble miser of the last century revealed his true character, and also the state of his purse, whenever he was fuddled, by murmuring softly to himself, "I'm very rich! I'm very rich!" In sober moments he complained continually of his

limited means. In the same way it is the brutal laborer who in his besotted state thrashes his horse and kicks his wife. A drunken woman, on the contrary, unless an habitual virago, rarely strikes any body. The accustomed vehicle for her emotions—her tongue—is the organ of whose services her unconscious cerebration avails itself.

Finally, the condition of perfect anæsthesia appears to be one in which unconscious cerebration is perfectly exemplified. The conscious Self is then so absolutely dormant that it is not only unaware of the most frightful lacerations of the nerves, but has no conception of the interval of time in which an operation takes place; usually waking to inquire, "When do the surgeons intend to begin?" Meanwhile unconscious cerebration has been busy composing a pretty little picture of green fields and skipping lambs, or something equally remote from the terrible reality.

There are many other obscure mental phenomena which I believe might be explained by the theory of unconscious cerebration, even if the grand mystery of insanity does not receive (as I apprehend it must do) some elucidation from it. Presentiments and dreams of the individual's own death may certainly be explicable as the dumb revelations of the diseased frame to its own nervous centre. The strange and painful, but very common, sense of having seen and heard at some previous time what is passing at the moment, appears to arise from some abnormal irritation of the memory (if I may so express it), evidently connected with the unconscious action of the brain. Still more "uncanny" and mysterious is the impression (to me almost amounting at times to torture) that we have never for years quitted the spot to which we have only that instant returned after a long interval. Under this hateful spell we say to ourselves that we have been weeks, months, ages, studying the ornaments of the cornice opposite our seat in church, or following the outline of the gnarled old trees, black against the evening sky. This delusion, I think, only arises when we have undergone strong mental tension at the haunted spot. While our conscious selves have been absorbed in speculative thought or strong emotion, our unconscious cerebration has photographed the scene on our optic nerves *pour passer le temps!*

The limitations and failures of unconscious cerebration would supply us with as large a study as its marvelous powers and achievements. It is obvious at first sight, that, though in the unconscious state mental work is sometimes *better* done than in the conscious (*e. g.* the finding missing names awake, or performing abstruse calculations in somnambulism), yet that the unconscious work is never more than the *continuation* of something which has been begun in the conscious condition. We recall the name which we have known and forgotten, but we do

not discover what we never knew. The man who does not understand algebra never performs algebraic calculations in his sleep. No problem in Euclid has been solved in dreams except by students who have studied Euclid awake. The merely voluntary and unconscious movements of our legs in walking, and our hands in writing and playing music, were at first in infancy, or when we began to learn each art, actions purely volitional, which often require a strong effort of the conscious will for their accomplishment.

Again, the failures of unconscious cerebration are as easily traced as its limitations. The most familiar of them may be observed in the phenomenon which we call Absence of Mind, and which seems to consist in a disturbance of the proper balance between conscious and unconscious cerebration, leaving the latter to perform tasks of which it is incapable. An absent man walks, as we say, in a dream. All men indeed, as before remarked, perform the mechanical act of walking merely voluntarily, and not volitionally; but their consciousness is not so far off but that it can be recalled at a moment's notice. The porter at the door of the senses can summons the master of the house the instant he is wanted about business. But the absent man does not answer such calls. A friend addresses him, and his unconscious brain, instead of his conscious self, answers the question *a tort et a travers*. He boils his watch for breakfast and puts his egg in his pocket, his unconscious brain merely concerning itself that something is to be boiled and something else put in the pocket. He searches up and down for his spectacles which are on his nose; he forgets to eat his dinner and wonders why he feels hungry. His social existence is poisoned by his unconquerable propensity to say the wrong thing to the wrong person. Meeting Mrs. Bombazine in deep widow's weeds, he cheerfully inquires, "Well, and what is Mr. Bombazine doing now?" albeit he has received formal notice that Mr. Bombazine departed a month ago to that world of whose doings no information is received. He tells Mr. Parvenu, whose father is strongly suspected of having been a shoemaker, that "for his part he does not like new-made men at the head of affairs, and holds to the good old motto, 'Ne sutor ultra crepidam;'" and this brilliant observation he delivers with a pleasant laugh, giving it all possible point and pungency. If he have an acquaintance whose brother was hanged or drowned, or scraped to death with oyster shells, then to a moral certainty the subjects of capital punishment, the perils of the deep, and the proper season for eating oysters will be the topics selected by him for conversation during the awkward ten minutes before dinner. Of course the injured friend believes he is intentionally insulted; but he is quite mistaken. The absent man had merely a vague recollection of his trouble, which unfortunately proved a stumbling-block

against which his unconscious cerebration was certain to bring him into collision.

As a general rule, the unconscious brain, like an *enfant terrible*, is extremely veracious. The "Palace of Truth" is nothing but a house full of absent-minded people who unconsciously say what they think of each other, when they consciously intend to be extremely flattering. But it also sometimes happens that falsehood has so far become second nature that a man's very interjections, unconscious answers, and soliloquies may all be lies. Nothing can be more false to nature than the dramas and novels wherein profound scoundrels, in the privacy of an evening walk beside a hedge, unveil their secret plots in an address to Fate or the Moon; or fall into a well-timed brain fever, and babble out exactly the truth which the reader needs to be told. Your real villain never tells truth even to himself, much less to Fate or the Moon; and it is to be doubted whether, even in delirium, his unconscious cerebration would not run on the accustomed ruts of fable rather than the unwonted paths of veracity.

Another failure of unconscious cerebration is seen in the continuance of habitual actions when the motive for them has ceased. A change in attire, altering the position of our pockets, never fails to cause us a dozen fruitless struggles to find our handkerchief, or replace our purse. In returning to an old abode we are sure sooner or later to blunder into our former sleeping-room, and to be much startled to find in it another occupant. It happened to me once, after an interval of eight years, to find myself again in the chamber, at the table, and seated on the chair where my little studies had gone on for half a lifetime. I had business to occupy my thoughts, and was soon (so far as consciousness went) buried in my task of writing. But all the time while I wrote my feet moved restlessly in a most unaccustomed way under the table. "What is the matter with me?" I paused at length to ask myself, and then remembered that when I had written at this table in long past days, I had had a stool under it. It was that particular stool my unconscious cerebration was seeking. During all the interval I had perhaps not once used a similar support, but the moment I sat in the same spot, the trifling habit vindicated itself afresh; the brain acted on its old impression.

Of course it is as easy as it is common to dismiss all such fantastic tricks with the word "Habit." But the word "Habit," like the word "Law," has no positive sense as if it were itself an originating cause. It implies a persistent mode of action, but affords no clue to the force which initiates and maintains that action. All that we can say, in the case of the phenomena of unconscious cerebration, is, that when volitional actions have been often repeated, they sink into the class of voluntary ones,

and are performed unconsciously. We may define the moment when a habit is established as that wherein the Volitional act become Voluntary.

It will be observed by the reader that all the phenomena of Unconscious Cerebration now indicated, belong to different orders as related to the Conscious Self. In one order (*e. g.* that of Delirium, Somnambulism and Anæsthesia) the Conscious Self has no appreciable concern whatever. The action of the brain has not been originated or controlled by the will; there is no sense of it either painful or pleasurable, while it proceeds; and no memory of it when it is over.

In the second order (*e. g.* that of rediscovered words, and waking at a given hour), the Conscious Self has so far a concern that it originally *set the task* to the brain. This done, it remains in entire ignorance of how the brain performs it, nor does Memory afterwards retain the faintest trace of the labors, however arduous, of word-seeking and time-marking.

Lastly, in the third class (*e. g.* that of natural dreams), the share of the Conscious Self is the reverse of that which it takes in the case of word-seeking and time-marking. In dreams we do not, and can not with our utmost effort, direct our unconscious brains into the trains of thought and fancy wherein we desire them to go. Obedient as they are in the former case, where work was to be done, here, in the land of fancy, they seem to mock our futile attempts to guide them. Nevertheless, strange to say, the Conscious Self—which knew nothing of what was going on while its leg was being amputated under chloroform, and nothing of what its brain was doing, while finding out what o'clock it was with shut eyes in the dark—is here cognizant of all the proceedings, and able in a great measure to recall them afterwards. We receive intense pain or pleasure from our dreams, though we have actually less to do in concocting them than in dozens of mental processes which go on wholly unperceived in our brains.*

Thus it would seem that neither Memory nor Volition have any constant relation to unconscious cerebration. We sometimes remember, and sometimes wholly forget its action; and sometimes it fulfils our wishes, and sometimes wholly disregards them. The one constant fact is, that *while the actions are being performed*, the Conscious Self is either wholly uncognizant of them or unable to control them. It is either in a state of high activity about other and irrelevant matters; or it is entirely passive. In every case the line between the Conscious Self and the unconsciously working brain is clearly defined.

Having now faintly traced the outline of the psychological facts illustrative of unconscious cerebration, it is time to turn to

* Reid boasted he had learned to control his dreams, and there is a story of a man who always guided his own fancy in sleep. Such dreams, however, would hardly deserve the name.

the brilliant physiological explanation of them afforded by Dr. Carpenter. We have seen what our brains can do without our consciousness. The way they do it is on this wise (I quote, slightly abridged, from Dr. Carpenter).

All parts of the nervous system appear to possess certain powers of automatic action. The *Spinal cord* has for primary functions the performance of the motions of respiration and swallowing. The automatic action of the *Sensory ganglia* seems to be connected with movements of protection—such as the closing of the eyes to a flash of light—and their secondary use enables a man to shrink from dangers of collisions, etc. before he has time for conscious escape. Finally we arrive at the automatic action of the *Cerebrum*; and here Dr. Carpenter reminds us that instead of being (as formerly supposed) the center of the whole system, in direct connection with the organs of sense and the muscular apparatus, the Cerebrum is, according to modern physiology—

“A superadded organ, the development of which seems to bear a pretty constant relation to the degree in which intelligence supersedes instinct as a spring of action. The ganglionic matter which is spread out upon the surface of the hemispheres, and in which their potentiality resides, is connected with the Sensory Tract at their base (which is the real centre of conveyance for the sensory nerves of the whole body) by commissural fibres. long since termed by Reid, with sagacious foresight, ‘nerves of the internal senses,’ and its anatomical relation to the sensorium is thus precisely the same as that of the Retina, which is a ganglionic expansion connected with the Sensorium by the optic nerve. Hence it may be fairly surmised—1. That, as we only become conscious of visual impressions on the retina when their influence has been transmitted to the central sensorium, so we only become conscious of ideational changes in the cerebral hemispheres when their influence has been transmitted to the same centre; 2. That as visual changes may take place in the retina of which we are unconscious, either through temporary inactivity of the Sensorium (as in sleep), or through the entire occupation of the attention in some other direction, so may ideational changes take place in the Cerebrum, of which we may be unconscious for want of receptivity on the part of the Sensorium, but of which the results may present themselves to the consciousness as ideas elaborated by an automatic process of which we have no cognizance.” *

Lastly, we come to the conclusions to be deduced from the above investigations. We have credited to the Unconscious Brain the following powers and faculties:

1. It not only *remembers* as much as the Conscious Self can

* Report of meeting of Royal Institution. Dr. Carpenter's Lecture, March 1, 1868, pp. 4, 5.

recall, but often much more. It is even doubtful whether it may not be capable, under certain conditions, of reproducing every impression ever made upon the senses during life.

2. It can *understand* what words or things are sought to be remembered, and hunt them up through some recondite process known only to itself, till it discovers and pounces on them.

3. It can *fancy* the most beautiful pictures and also the most terrible ones, and weave ten thousand fables with inexhaustible invention.

4. It can perform the exceedingly difficult task of mental arrangement and logical division of subjects.

5. It can transact all the mechanical business of walking, reading, writing, sewing, playing, etc. etc.

6. It can tell the hour in the middle of the night without a timepiece.

Let us be content with these ordinary and unmistakable exercises of unconscious cerebration, and leave aside all rare or unquestionable wonders of somnambulism and cognate states. We have got Memory, Fancy, Understanding, at all events, as faculties exercised in full by the Unconscious Brain. Now it is obvious that it would be an unusual definition of the word "Thought" which should debar us from applying it to the above phenomena; or compel us to say that we can remember, fancy, and understand without "thinking" of the things remembered, fancied or understood. But Who, or What, then, is it that accomplishes these confessedly mental functions? Two answers are given to the query, each of them, as I venture to think, erroneous. Buchner and his followers say, "It is our physical Brains, and these Brains are ourselves."* And non-materialists say, "It is our conscious Selves, which merely use our brains as their instruments." We must go into this matter somewhat carefully.

In a certain loose and popular way of speaking, our brains are "ourselves." So also in the same way of speaking are our hearts, our limbs, and the hairs of our head. But in more accurate language the use of the pronoun "I" applied to any part of our bodies, is obviously incorrect, and even inadmissible. We say indeed, commonly, "I struck with my hand," when our hand has obeyed our volition. It is, then, in fact, the will of Self which we are describing. But if our hand has been forcibly compelled to strike by another man seizing it, or if it has been shaken by palsy, we only say "My hand was forced," or "was shaken." The limb's action is not *ours*, unless it has been done by our will. In the case of the heart, the very centre of

* Buchner's precise doctrine is, "The brain is only the carrier and the source, or rather the sole cause of the spirit or thought; but not the organ which secretes it. It produces something which is not materially permanent, but which consumes itself in the moment of its production."
—KRAFT UND STOFF, chap. xiii.

physical life, we never dream of using such a phrase as "I am beating slowly," or "I am palpitating fast." And why do we not say so? Because, the action of our hearts being involuntary, we are sensible that the conscious "I" is not the agent in question, albeit the mortal life of that "I" is hanging on every pulsation. Now the problem which concerns us is this: Can we, or can we *not*, properly speak of our brains as we do of our hearts? Is it more proper to say, "I invent my dreams" than it is to say, "I am beating slowly?" I venture to think the cases are precisely parallel. When our brains perform acts of unconscious cerebration (such as dreams), they act just as our hearts do, *i. e.* involuntarily; and we ought to speak of them as we always do of our hearts, as of organs of our frame, but not our Selves. When our brains obey our wills, then they act as our hands do when we voluntarily strike a blow; and then we do right to speak as if "we" performed the acts accomplished by their means.

Now to return to our point. Are the Anti-Materialists right to say that the agent in unconscious cerebration is "We, ourselves, who merely use our brains as their instruments;" or are the Materialists right who say, "It is our physical brains alone, and these brains are ourselves?" With regard to the first reply, I think that all the foregoing study has gone to show that "we," are *not* remembering, *not* fancying, *not* understanding what is being at the moment remembered, fancied or understood. To say, then, that in such acts "we" are "using our brains as our instruments," appears nothing but servile and unmeaning adherence to the foregone conclusion that our brains are nothing else than the organs of our will. It is absurd to call them so when we are concerned with phenomena whose specialty is that the will has nothing to do with them. So far, then, as this part of the argument is concerned, I think the answer of the anti-Materialists must be pronounced to be erroneous. The balance of evidence inclines to the Materialists' doctrine, that the brain itself performs the mental processes in question, and, to use Vogt's expression, "secretes Thought" automatically and spontaneously.

But if this presumption be accepted provisionally, and the possibility admitted of its future physiological demonstration, have we, with it, accepted also the Materialist's ordinary conclusion that *we* and our automatically thinking brains are one and indivisible? If the brain can work by itself, have we any reason to believe that it ever works *also* under the guidance of something external to itself, which we may describe as the Conscious Self? It seems to me that this is precisely what the preceding facts have likewise gone to prove—namely, that there are two kinds of action of the brain, the one automatic, and the other subject to the will of the Conscious Self; just as the actions of a

horse are some of them spontaneous and some done under the compulsion of his rider. The first order of actions tend to indicate that the brain "secretes thought;" the second order (strongly contrasting with the first) show that, besides that automatically working brain, there is another agency in the field, under whose control the brain performs a wholly different class of labors. Everywhere in the preceding pages we have traced the extraordinary *separation* which continually takes place between our Conscious Selves and the automatic action of the organ, which serves as our medium of communication with the outward world. We have seen, in a word, that we are not Centaurs, steed and rider in one, but horsemen, astride on roadsters which can trot very well a little way when we drop the reins, and which at other times play and canter off without our permission.

When we place the phenomena of Unconscious Thought on one side, and over against them our conscious personality, we obtain, I think, a new and vivid sense of the separation, not to say the antithesis, which exists between the two; close as is their mutual interdependence. Not to talk about the distinction between object and subject, or dwell on the absurdity (as it seems to us) of the proposition that we ourselves are only the sum-total of a series of cerebrations—the recognition of the fact *that our brains sometimes think without us*, seems to enable us to view our connection with them in quite a new light. So long as all our attention was given to Conscious Thought, and philosophers eagerly argued the question, whether the Soul did or did not ever sleep or cease to think, it was easy to confound the organ of thought with the Conscious Self who was supposed alone to set it in action. But the moment we mass together for review the long array of the phenomena of Unconscious Cerebration, the case is altered; the severance becomes not only cogitable, but manifest.

Let us then accept cheerfully the possibility, perhaps the probability, that science ere long will proclaim the dogma, "Matter can think." Having humbly bowed to the decree, we shall find ourselves none the worse. Admitting that our brains accomplish much without our conscious guidance, will help us to realize that our relation to them is of a variable—an intermittent—and (we may venture to hope) of a *terminable* kind.

That such a conclusion, if reached, will have afforded us any *direct* argument for human immortality, can not be pretended. Though we may succeed in proving "that the Brain can think without the Conscious Man," the great converse theorem, "that the Conscious Man can think without a Brain," has as yet received no jot of direct evidence; nor ever will do so, I hold, while we walk by faith and not by sight, and Heaven remains "a part of our religion, and not a branch of our geography!"

But it is something, nay it is surely much, if, by grouping among the obscurer facts of consciousness, we may attain the certainty that whatever be the final conclusions of science regarding our mental nature, the one which we have most dreaded, if reached at last, will militate not at all against the hope, written on the heart of the nations, by that Hand which writes no falsehoods—that “when the dust returns to the dust whence it was taken, the Spirit—the Conscious Self of Man—shall return to God who gave it.”

DEATH DURING THE ADMINISTRATION OF CHLOROFORM.

By W. T. BRIGGS, M. D., Professor of Principles and Practice of Surgery in the University of Nashville.

I had been using chloroform so long and so frequently in my practice, and with such satisfaction, that I was fain to believe that death would ever take place from its effects, if it was properly administered.

In a lecture on the subject of Anæsthesia, delivered to our class but a few weeks since, I gave a decided preference to chloroform over all other anæsthetics, because, while it was more pleasant, prompt, and powerful, I was satisfied that, with proper care, death would result very rarely, if ever, from its action.

In less than a month after my confident assertion to the contrary, death *did* result, during its administration, to a patient in my own practice. I will give the history of the case:

Smith McKinney, aged about 30 years, a strong, stout man, while gathering ice, on the 26th of December, got into an altercation with a negro man, in which he received a severe blow on the head from an ice-hook. He was knocked down, and rendered insensible for a considerable time.

Shortly after his injury, Dr. B. F. Manlove was called to him. He found him recovering from his insensibility, but very much bewildered, with a slow, full pulse, breathing not materially changed, pupils slightly dilated. He found a very ugly contused wound just below and behind the parietal protuberance. Upon introducing his finger into the wound, he discovered the bone denuded, and probably fissured, but could detect no depression.

As the patient had been drinking pretty freely, the Doctor thought the disturbance of the cerebral functions depended on that cause, and hoped that, after a short time, they would disappear.

On the third day after the injury, however, his symptoms not

improving, a consultation was desired. I was summoned to the Doctor's assistance, but failing to meet him at the appointed time, I did not examine the case, but requested that he should make another engagement, if he desired.

On the 31st of December I was again urgently requested to see the case with the Doctor. I desired that Dr. Eve should be added to the consultation.

We met at 1 o'clock. The patient had slept a greater part of the previous night, had got up, put on his boots and gone out at a window into the yard. When brought back and put to bed, he sank into a semi-comatose state, occasionally talking incoherently, in which condition we found him at our visit. He could be aroused from his stupor by calling loudly, or by violent shaking, but he did not appear to understand our questions, and soon fell back into a stupid condition. His breathing was nearly natural, pulse full and slow—sixty to the minute; extremities inclined to be cold. The wound was gaping, irregular, puffy, and very sensitive to the touch, the slightest handling causing the patient to move his head about uneasily.

In consultation, it was decided to enlarge the wound and dissect up the scalp, in order to find out the condition of the bones beneath. We believed that the patient had received a punctured fracture, which had excited, and was keeping up, an inflammation of the membranes, and probably of the brain itself.

The patient was brought to the edge of the bed before the window, and an attempt made to shave off the hair around the wound. After great difficulty, in consequence of the restlessness of the patient, it was effected.

We did not think we could make the exploratory incisions without the aid of anæsthesia, so I stepped across the room to my case of instruments, and took out a two-ounce vial of Squibb's chloroform, and handed it to Dr. Manlove, who poured out about a teaspoonful on a loose towel, and held it some three or four inches from the patient's face. In about two or three minutes, the patient seemed to be under its influence, when I made an incision directly across the wound, to the bone beneath. The patient moved quickly, and cried out with pain. Dr. Eve or I told Dr. Manlove to give more chloroform, which he did. The patient was quieted, and I proceeded to dissect the scalp from the bone. In a moment afterwards, I heard a peculiar gurgling noise issue from the mouth, which I regarded as ominous. I at once arose from my seat, pushed the towel from the face, grasped the tongue with my fingers, and pulled it forward. At the same time I placed my fingers on the pulse. It was gone.

We were satisfied our patient was dead beyond redemption, but determined to make vigorous efforts to resuscitate him. We

had his head lowered, threw cold water in his face, slapped him with the hand, and then instituted artificial respiration. We continued our efforts for an hour and a quarter, but without avail. From the moment the pulse ceased to beat there was not another pulsation of the heart. The lungs were easily filled and emptied, but it had no effect whatever on the heart's action.

A post mortem examination was denied.

REMARKS.—In this case Squibb's chloroform was used, and not more than two drachms (by actual measurement) were poured from the bottle, at least one-half of which was left in the towel when it was removed. It was held at a distance of four to six inches from the face for several minutes, when it was brought to within an inch. Several minutes elapsed before the patient was even partially under its influence. I impressed the importance of giving plenty of air with the anæsthetic on Dr. Manlove, which he did; so that there could have been no fault in the article itself, or in the mode of its administration. I am satisfied that the immediate cause of death, in this case, was the inhalation of chloroform; but that no bad effect would have resulted, had not some fatal lesion of the brain existed at the time, and had not the patient been still further prostrated by want of food and stimulants, after his injury; his physician, and family also, informing us after his death, that he had taken very little of either during his sickness.

It was the opinion of Dr. Eve and myself, after the partial examination during the operation, that there was a fissure of the bone at the seat of injury, and a contre coup fracture at the base of the skull.

IMPROVED DOVER'S POWDER.

By M. D. KEATOR, M. D. of Tolono, Ill.

A very convenient and useful compound is Dover's Powder; but, unfortunately, a very *nauseous* one. I have for several years past had it under consideration, making various changes in its composition; but until recently with poor success. The diaphoretic powder of Dr. Tully, and also that lately recommended by Dr. Brinsmade, I have found, on trial, to be good *anodynes*, but far inferior in *diaphoretic* effect to the old Dover. The ipecacuanha cannot be dispensed with, but I think the opium and sulphate potassæ (the main nauseants) can be replaced with better ingredients. Ipecac. in doses under half a grain is anti-emetic, and "not guilty" in the nauseous taste of Dover.

Out of Dover's, Tully's and Brinsmade's powders I have compounded a *fourth*, which I believe contains the excellencies of *all*. There is one grain of ipecacuanha, and one-sixth grain sulph. morphia (equal to 1 gr. opium), to every 10 gr. of the mixture. The camphor adds much to it as an anodyne; the chalk

is ant-acid, and necessary to hold the camphor in pulverized form, and the liquorice, besides disguising the taste of the rest, is of itself useful as a demulcent, expectorant, etc. I can confidently recommend this to my brethren of the profession who choose to give it a trial, as *superior to the old Dover's Powder in every respect.*

R Sulph Morphia.....grs. x.
 Pulv. Camph.....3iii
 " Ipecacuan.....3i
 Creta Preparat.....3iii
 Pulv. Glycyrrh.....3iii

Thoroughly mix. Dose same as Dover (in water).

DIAGNOSIS BY EXAMINATION OF URINE IN OBSCURE FORMS OF URINARY DISEASE.

By SIR HENRY THOMPSON, Surgeon and Prof. of Clinical Surgery to University College Hospital.

I wish to call attention to a mode of obtaining a diagnosis in some rare and doubtful cases of disease of the urinary organs, when all other modes have failed. I described it first in my clinical lectures at University College Hospital, some years ago, as a means of observation which had never to my knowledge been recommended or practiced, and which I had adopted systematically, and which I have since found of extreme value in some exceptional instances. Thus, for example, we not seldom meet with a patient whose urine, usually containing a small or varying quantity of blood and pus, presents more or less albumen, but relative to the precise origin of which it is desirable to be certain. Some of the deposit produced is of course due to the admixture named; and while we may be right in believing the quantity to be equal only to the blood and pus in the urine, we cannot be certain whether some of it may not be due to renal changes. In such a case, the other signs, and the symptoms also, are often insufficient to enable us to say whether they are due solely to vesical disease or to pyelitis, or whether there may be some renal affection, not to say constitutional albuminuria, complicating the conditions named. On the other hand, the symptoms may apparently indicate only an affection of the bladder; there may be no symptom of disease involving any higher portion of the urinary tract; nevertheless, the experiment to be described may prove the kidneys to be almost solely the seat of the malady. Few cases present more of obscurity than some of those with the characters thus briefly indicated.

The proceeding may be described as follows. A No. 6 or 7 flexible catheter is introduced into the bladder while the patient is in the upright position, and the urine drawn off is placed in a vessel apart. By means of an elastic gum-bottle containing a few ounces of warm water, the bladder is washed out two or three times, with about an ounce or two at a time, until the out-

flowing fluid is perceived to be quite clear. The catheter being left *in situ*, fresh urine from the kidney, untainted by any admixture, will now pass by drops into a test-tube placed to receive it; and a specimen, therefore, of true renal secretion, unqualified by vesical products, will be furnished in about five minutes, sufficing for a chemical analysis, and useful to a certain extent for microscopical observation. By this simple process I have been enabled to solve the question of disease of the kidneys in some cases in which hitherto doubt as to their implication existed; and have often had the satisfaction of demonstrating that the secretion obtained direct from the organs was absolutely free from any sign of disease, where they had previously been suspected to be the seat of grave mischief. But there is one source of fallacy on applying this test which is occasionally to be met with. An illustration of it exists at this moment in the case of a man now in my ward at University College Hospital. If the bladder easily bleed with instrumental contact, as occasionally happens, the process may produce a slight admixture of blood in the urine so obtained, barely enough to tint it, but sufficient perhaps to occasion a considerable deposit of heat and nitric acid. It should never be forgotten, in estimating these products, that, for equal quantities of blood and pus, the former produces a much more bulky deposit of albumen than the latter. Of course, then, this disposition to slight bleeding, as a result of the procedure, and any augmentation of albumen so caused, is of itself strong evidence of vesical rather than of renal disease. I should say that the occurrence just named is one of rare occurrence.—*British Medical Journal*.

SPECIAL SANITARY REPORT.

“HEALTH OFFICE, CINCINNATI, Feb. 21, 1871.

“TO THE HONORABLE BOARD OF HEALTH:

“GENTLEMEN—In several different reports which I have had the pleasure of presenting to this Board, I alluded to the influence of exhalations from cess pools, sewers and privy vaults in the production of certain diseases. In referring to this subject now my object is to direct special attention to the fact that a continuance of certain practices now common in Cincinnati is likely to produce the most pernicious results, endangering the public health and comfort.

“But there is still another point to which I wish particularly to direct attention. But few persons seem to be aware that the discharges from (especially) the sick are the essential cause of many of our most common diseases, such as typhoid fever, diarrhea, dysentery, dyspepsia, cholera, etc. The vessel containing the discharges is often allowed to remain for hours in the room

or ante-room of the patient, or its contents emptied into the open privy vault. In either case the persons about the house are compelled to breathe the gases thus generated and thrown off from the excrement of the sick thus carelessly handled and more carelessly disposed of. People should be taught that the gases of the discharges from the sick are almost always highly poisonous, and liable to produce diseases. Dr. Murchison, of the London Fever Hospital, has demonstrated, by a large collection of facts, that emanations from sewers and privy vaults are the chief causes of fever. You are all familiar with the alarming disease which occurred at the National Hotel in Washington city, in 1857, caused by exhalations from an obstructed privy drain.

"There is not now a fact in medicine more clearly established than the one under consideration, and hence the great necessity that exists for disinfecting the feces from patients sick with typhoid fever or any disease of the bowels. The feces of such patients should not be emptied into the privy vault, unless disinfected first, because person going there are extremely liable to contract the disease from the exhalations. In the village of North Boston, containing only nine families, a stranger was attacked with typhoid fever, and after a short illness died. The villagers, excepting one family, procured their water from the well in the tavern yard; the other party had a well of their own, and not being on good terms did not get any water from the tavern well. Soon after the death of the stranger, all those using the water from the tavern well were taken sick with typhoid fever, which aroused the suspicion that the family not using the tavern well water had poisoned it. Scientific investigation, however, showed that the disease had been propagated by contact with the gases from a privy vault."

"At a meeting of the Association of Medical Officers of Health, Dr. Ballard, Health Officer of Islington, reported a remarkable epidemic of typhoid fever. Within less than a semi-circle of a quarter of a mile radius one hundred and sixty-eight cases had occurred within two weeks. Most of the cases occurred in the houses of the wealthy. It was at last discovered that the outbreak was due to the distribution of milk from a particular dairy. Out of one hundred and forty families supplied from the dairy, seventy suffered from typhoid fever, and thirty deaths occurred. Twice as many cases of typhoid fever occurred in the limited district referred to as in the whole of the rest of the parish. The disease picked out the customers of this dairy in separate streets and squares remote from each other, and attacked females and children, and such persons as took this particular milk. Careful investigation as to how the contagion entered the milk revealed an underground tank made of wood, which had rotted, and in part given way, and that from this spot there were several rat burrows, through which water rapidly ran

off into some old drains discovered on deeper exploration. This water, contaminated by the washings of the stable and grounds, had been used either for diluting the milk or for careless washing the milk cans.

"But the lungs as well as other organs are especially affected by gaseous and decomposing substances. According to Liebig, chemical actions are propagated in no organs so easily as in the lungs, and it is well known that diseases of the lungs are, above all others, frequent and dangerous. When gaseous and decomposing substances, or those which exercise a chemical action, such as sulphuretted hydrogen, (a privy vault gas,) and carbonic acid, obtain access to the lungs, they meet with less resistance in these organs than in any other. The chemical process of slow combustion in the lungs is accelerated by all substances in a state of decay or putrefaction, (by ammonia and alkalies,) but it is retarded by empyreumatic substances, volatile oils and acids. Sulphuretted hydrogen (a gas produced by decomposition of the contents of privy vaults) produces, according to Liebig and other authorities, immediate decomposition of the blood, the sulphurous acid combining with the tissues. When the process of respiration is modified by contact with matter in the progress of decay, and this matter communicates the state of decomposition, of which it is the subject, to the blood, disease is produced.

"If the matter undergoing decomposition is the product of a disease, it is called contagion; but if it is a product of decay or putrefaction of animal or vegetable substances, or if it acts by its chemical proprieties, (not by the state in which it is,) and, therefore, enters into combination with parts of the body, or causes their decomposition, it is termed miasma.

"Gaseous contagious matter is a miasma emitted from the blood, and capable of generating itself again in the blood.

"These facts are here introduced to illustrate the manner in which gaseous exhalations from human excrement—from privy vaults, sewers, foul drains, &c., operate to produce or originate diseases which may be propagated and spread from individual to individual, and from neighborhood to neighborhood. It will be noted from the above related instances, that water is a very common medium of communication of diseases, as well as the air.

"The remedy for these evils is apparent, viz: Sewer drainage, and, above all, human excrement should not, under any circumstances, be allowed to be thrown into any stream of water that is used for palatable or culinary purposes. This kind of pollution of our creeks and rivers should be made the subject of Government legislation.

"Disinfectants should be used in every sick chamber, and especially should the discharges from the sick be disinfected and promptly removed from the house. Privy vaults should be regularly and properly disinfected, in order to fix the gaseous exhal-

ations, and prevent their being carried through the air, and also to arrest and prevent decomposition of the privy vaults.

"This subject is more important at this time, as spring is almost at hand. If privy vaults are properly cleaned and disinfected, also drains, cellars, etc., many of the diseases of warm weather will be prevented, and suffering, expenses, and annoyances avoided. Very respectfully,

"W. CLENDENDIN, Health Officer."

THE ANNUAL COMMENCEMENT EXERCISES OF THE CINCINNATI COLLEGE OF MEDICINE AND SURGERY.

The Cincinnati College of Medicine and Surgery held its annual commencement exercises Thursday evening, Feb. 16, at the Christian Church, on Sixth street, west of Smith. The Board of Trustees, Faculty and the class, with invited guests and members of the press, met at this place at half-past seven o'clock.

The exercises opened with the following address of Dr. Lilienthal.

GENTLEMEN OF THE GRADUATING CLASS: Suffering from a severe cold, I must forego the pleasure of addressing you on this, your gala day, as you expect it from the President of your college. Still I can not forego the agreeable duty of offering you in the name of the Board of Trustees, our sincere congratulations at the success that heretofore has crowned your efforts. According to the statement of our learned faculty you all have passed an excellent examination, and by their advice and with their consent I am going to confer on you all the well deserved degree of Doctor of Medicine and Surgery.

You are about leaving your *Alma Mater*; try in your future career to be a credit to her, and to assist her in acquiring that high position she is striving for. Both the Board and the Faculty will do all in their power to extend the sphere of her usefulness. We have passed in our semi-annual meeting of this week a resolution granting free access to the students of the Law School of this city to all our lectures, and especially to those of medical jurisprudence.

If the McMicken University, soon to be opened in this city, will be unable at once to establish a thoroughly organized medical department, or by power of circumstances will be forced to delay such an organization, our college intends to erect a building for itself, adorned with all possible modern improvements, which will be an honor to the city and the medical profession. We shall try to build it on shares, and hope that every physician who has graduated at college, shall contribute his mite as far as his means will go.

While thus we shall endeavor to raise the Cincinnati College on equal footing with the best medical institutions of our country, we trust and hope that you will add new luster to the honor of our institution by proving yourselves to be worthy members of your noble profession.

In order to accomplish this aim, be studious and industrious. You leave the school-bench only to exchange it with the high-school of life and practice. Mind Newton's old motto: "Physics, but not metaphysics." Abstract speculative theories, with their cobwebs of sys-

tems and unfounded inferences, are at present discarded, because they are of little practical value. Observation and experiment are the keys to the mysteries and laws of nature. By means of them we shall always learn better to understand the working of nature; and the more we fathom and discover her secrets, the sooner will your profession be freed from the reproach of empiricism, and medicine acquire the high title of a science in the noblest and fullest sense of the word.

Let the old motto, *In verba magistri jurare* never be charged against you. The lectures at all colleges assist only in introducing you into your profession, but they do not intend then to command you to "stand still." Blind faith makes conscience superstitious; in politics, submissive; in religion, intolerant. Without suspicion there is no free inquiry, and without free inquiry there is no progress, neither in science nor in politics. Learn, therefore, how to doubt and to investigate for yourselves, and a bright future will be in store for you, both as theoreticians and as practitioners.

By the side of the sick bed be friendly, affable and self-reliant. The patient and his sorrowing family await you as a God-sent messenger, to bring relief and comfort into their gloomy mansion. Their hopes rest on your skill and untiring efforts. A friendly countenance encourages them all, and you know but too well how much physical ease assists in removing physical disease. A sour, morose and despairing countenance depresses your and their mind. Prove yourself to be their sympathizing friend, and they always will gratefully revere you as the friend in need, who is a friend indeed.

And without neglecting your own interest—for the physician must live by means of his practice, as well as any member of another profession—be charitable and liberal toward the poor. Do not neglect them; for the hut of the poor will be your stepping-stone to the mansion of the rich; you will sow in the deserted room of the poor, and gather your rich harvest with the wealthy and opulent.

And so may then your future not only answer, but surpass, your most sanguine expectations. May every report that may reach us hereafter from any of you renew the assurance that you all are working for the good of suffering humanity, for your own success and reputation, and for the credit of your college and its learned Professors.

At the close of his remarks the Doctor delivered the diplomas, accompanying the act with appropriate words. The names and residences of the Graduating Class are as follows: C. L. Curtis, E. H. Chilcote, William M. Campbell, A. E. Duncan, Ohio; William M. De Motte, William B. Gilliatt, Indiana; D. H. Heiber, Pennsylvania; Finley Lee, Indiana; J. H. Maguire, Ohio; S. Morrow, Missouri; Oliver P. Norris, Illinois; W. B. Rosamond, Ohio; M. M. Smith, Tennessee; R. R. Smith, S. V. Wright, Ohio; Elias Jones, Kentucky, and G. T. Whitaker, Kansas.

This ceremony being completed, Dr. Bramble, Professor of Anatomy, delivered the valedictory address.

The exercises ended with a handsome spread at the elegant establishment of Keppler, the restaurateur. Toasts and speeches were mingled *inter pocula*, Dr. Lilienthal announcing the toasts and sentiments.

To the toast, "The Graduating Class" Dr. S. V. Wright responded. Prof. A. J. Miles spoke to the toast: "Our Learned Faculty," with its accompanying sentiment. Dr. Tate spoke to a volunteer senti-

ment. Dr. Bramble was toasted in compliment to his excellent address, and replied handsomely. An appropriate speech was made by Dr. R. C. S. Reed, which closed at a very temperate hour, an unusually pleasant evening.

Book Notices.

THE CHANGE OF LIFE IN HEALTH AND DISEASE. A practical treatise on the nervous and other affections incidental to women at the decline of life. By EDWARD JOHN TILT, M. D. From the third London edition. Philadelphia: Lindsay & Blakiston. Cincinnati: G. E. Stevens & Co. 8vo. pp. 292, 1871.

This work came to hand too late for us, with our other duties, to give it the examination necessary to write about it ourself, and we will therefore copy from a notice of it by the London *Lancet*:

"It is divided into twelve chapters: the first five are an introductory one on the physiology of the change of life, one on its pathology, one on its therapeutics, and one on its hygienics. Then follow chapters which treat consecutively of the diseases of the reproductive organs at this period of life, of the diseases of the digestive organs, and of the skin; the tenth treats of the diseases of the ganglionic nervous system; and the eleventh of the cerebro-spinal affections; and the concluding chapter is miscellaneous. Thus the subject of climacteric derangements is pretty nearly exhausted, and additional value is given to the volume by numerous interesting tables, which exhibit various physiological and pathological facts in a clear and definite manner."

THE PHYSICIAN'S HAND BOOK FOR 1871. By WM. ELMER, M. D. Published by W. A. Townsend & Adams, N. Y.

This edition of the Hand Book has been completely re-written, and re-stereotyped throughout, besides containing much valuable information as a classification of diseases, with their distinguishing symptoms, list of poisons and antidotes, diagnostic examination of the urine, list of incompatibles, etc. etc. It has a register of daily practice for 64 patients, and a blank for each for every day in the year, so that an account may be kept with the greatest facility of the number of visits made, of the medicines delivered, office practice, etc. Handsomely bound in morocco with a tuck.

A TREATISE ON THE CHRONIC INFLAMMATION AND DISPLACEMENTS OF THE UNIMPREGNATED UTERUS. By WM. H. BYFORD, A. M., M. D. Prof. of Obstetrics, etc. in Chicago Medical College. 2nd edition enlarged with numerous illustrations. Philadelphia: Lindsay & Blakiston. Cincinnati: G. E. Stevens & Co. 8vo. pp. 248, 1871.

This work will be found particularly useful to general practitioners. The different subjects are treated plainly and concisely, and just such information is given as will be of the most practical value. While prolixity is avoided, nothing of real importance is omitted. In preparing the second edition, it has been the object of the author to add to the usefulness of the work by thoroughly revising and correcting, enlarging and illustrating it.

On page 19 the author says that his views concur with those who believe in the great sympathetic influence of the uterus, and who consider inflammation and its accompanying effects to be the condition upon which its sympathetic energies depend.

Editorial.

A QUEER FELLOW.—Who is a queer fellow? Why the editor of the *Lancet and Observer*. We have often tried to fathom him, but have always failed. It may be because he is so very shallow that there is nothing of him, but we wouldn't like to express an opinion.

In the February number of the *Lancet and Observer* is the following editorial statement:

"Some months ago, a subscriber in the interior of Kentucky, [We hope it was not one of our old friends, Bisk or Spillman, Es.] renewed his subscription *uxoris propter*; he had a prejudice against the Medical College of Ohio, and regards the *Lancet and Observer* as too much of an organ for that school."

Now it is so exceedingly funny that any one should ever mistake the *L. and O.* as an organ of the Medical College of Ohio, that we are really at a loss to know how to express ourselves about it. Some hint that there is not a word of truth in the story, but the supposition involves the insinuation that the editor is guilty of fibbing, which we are not yet prepared to assent to. We would rather believe that the subscriber was in a state of *non compos mentis*, and did not know what he was writing about. But then the editor should have recognized it and not exposed him. We certainly could not have expected that publishing the story would prove any thing, if it was believed, other than that his correspondent was either drunk or crazy. It has been suggested, to us, however, that the editor's vision was in an illusory condition at the time he received the protest, and, in consequence, he read "Medical College of Ohio" instead of "Miami Medical College." We are aware that a *poison in the blood* may thus disorder the sensory ganglia, and will admit that what is said about "red noses" further on looks a little suspicious. But view the matter from every point and it is *queer*.

In the same number of the *Lancet and Observer*, on page 120 is the following excellent advice: "Be charitable, friends, courteous, * * cultivate medical associations; cultivate honorable professional intercourse; cultivate yourselves." Now if it were not for the villification of four eminent gentlemen belonging to other medical schools than the one to which the editor belongs which occurs in the same number, we might have been disposed, after reading this moral rhapsody, that it was not intended by it to deceive like Ah Sin's "pensive and child-like smile" was designed to mislead Bill Nye. But under the circumstances it must be regarded as only designed to beguile the unwary, for compare it with the following on page 119: "Prof. Blackman, Prof. Connor, Prof. Whittaker, Prof. Miles have had a prompt and prominent place given them (in the *Lancet and Observer*); so true is this, that a very judicious medical gentleman has repeatedly said: 'you are too generous to your enemies; you admit to prominent place men who would cheerfully cut your throat on the shortest notice—personally or professionally! All of which is true.'" Here (we do not garble the extract) Profs. Blackman, Connor, Whittaker, and Miles are spoken of as the vilest sort of assassins, common cut-throats. These gentlemen should write often for the *Lancet and Observer*, for besides its defamation of them, it plumes itself upon its generosity in admitting them to its pages, and quotes the fact in evidence in their faces. But then isn't he a queer fellow who will in the same editorial mount, as it were, to the skies in a grand moral flight and dive down into the lowest depths of defamation? But may be the following quotation from the same editorial may give a clue to our editor's inconsistencies: "If a man have a red nose, especially if he is

conscious there is a good reason in his habits for his deformity, he passes through society continually observing noses! He sees a great many red noses, and imagines a great many more, and he regards them all as rum noses." Now we have a flood of light thrown in upon all this queeriness—a red nose has something to do with it.

OBITUARY.—At the regular meeting of the Covington and Newport Medical Society, held in Covington on the 14th of February, 1871, the following resolutions offered by Dr. D. H. Jessup were unanimously adopted:

Resolved, That it is with feelings of regret that this Society has learned of the recent death of one of its members, Dr. Samuel Hunter, of this city.

Resolved, That in his untimely death, having been cut down in the very morning of his professional life, this Society and the profession have lost a member who gave bright promise of professional distinction.

Resolved, That we tender our sympathies to the family of the deceased with expressions of esteem for his exemplary private as well as professional character.

Resolved, That a copy of these resolutions be furnished to the bereaved family, and also to the Cincinnati and Louisville Medical Journals.

W. W. HENDERSON, *Pres't.*
A. G. DRURY, *Sec'y.*

THE GEORGIA MEDICAL ADVISER.—This is a new monthly medical journal published at Atlanta, Ga., edited by Drs. T. S. Powell, and W. T. Goldsmith. The first number is a very creditable one and promises well of the future. We hope the profession of the South particularly will give it their support. 8vo. pp. 40, \$2 per annum.

PHOTOGRAPHS.—We are frequently inquired of by graduates of the school, how photographs of the Faculty of the Cincinnati College of Medicine and Surgery can be procured. In order to save us

the trouble of replying to each inquirer, we will state that very excellent *cartes de visite* of each professor can be obtained separately by addressing Mr. J. W. Winder, 132 West Fourth street. Price 10 cents a piece, enclosing sufficient stamps to pre-pay postage.

THE HIPPOCRATIC OATH.—This time-honored introduction to the medical profession, which is still administered in many foreign schools, and which might well replace, as it embodies, all codes of ethics, has undergone various modifications since its author's day. The Leyden version, the Latinity of which is questionable, runs as follows—

Testor Deum Omnipotentem, me hoc Jurisjurandum pro virile servaturum.

Preceptores, qui Medicam Artem me docuerunt, et ad supremum in illa honoris gradum everserunt, Parentum iocohabiturum.

Victas rationem Egris commodam et salutarem prescripturum.

Nullius intercessione, nec sponte, noxium Pharmacum cuiquam propinaturum; sed sancte et caste Vitam Artemque meam instituturum.

In quascunque Domas intravero, ad agrotantium duntaxat salutem ingressurum, et ab omni injuria inferenda procul futurum.

Quoscunque inter curandum videro audire, et quidem ea ferri not expediat, silentis suppressurum.

Hocce Jusjurandum integre servanti mihi et Vita et Arte felicitati frui contingat; sin sciens sefellero et pejeravero, contraria eveniant omnia.

At Utrecht, the form is briefer and reads thus:

Sancte promitto, me eos qui me artem medicam docuerunt, in eaque instituerunt, vel promoverunt, Parentum loco habiturum et honoraturum; academia ultrajectura decus et incrementum pro virile promoturum. In tractandis Egris, Dieta, olisque Remediis, quantum ingeu viribus assequar, ex Agrorum commodo usurum nec prece, nec pretio, aliave de causa, Pharmacum calamitosum cuiquam propinaturum; nec gravidæ abertum procuraturum. Audita vel visa intercurandum, nathennucianda, silentio involuturum. Et in his omnibus pietati, honestati, et conscientie integritati, operam daturum. Hec si sincere præstitero, felix mihi, per Deum, Vito et ars esto; sin minus, adversa mihi eveniant omnia.—MED. GALETTE.

TYPOGRAPHICAL ERRORS.—A couple of typographical errors occurred last month in the article of Dr. J. T. Davis, on Rheumatism. Instead of "effects of Nature" read "efforts;" instead of "opium and morphine" read "opium or morphine."

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PARTIAL REPORT OF THE SECTION ON MEDICAL JURISPRUDENCE AND TOXICOLOGY TO THE CINCINNATI ACADEMY OF MEDICINE.

By A. J. MILES, M. D., Prof. of Pathology in Cincinnati College of Medicine and Surgery.

While it is the principal duty of the physician to cure the sick, and advise individuals and families that may consult him on matters conducive to their physical well-being, it is also equally incumbent, and as plainly his duty in matters pertaining to the *public good*, for him to demand the enforcement of laws—or, where deficient, the enactment of new laws—to conserve the public health and avert sickness and death.

As some cases of poisoning from the arsenite of copper have occurred under our observation in this city during the last year, growing out of a non-observance of the State law regulating the sale of poisons, we propose giving them as the basis of our report.

CASE I.—I was called January 8th, 1870, at 6 o'clock P. M. to see Mr. L. a German, age forty years. I found the patient vomiting, and complaining of pain in his stomach, with depressed pulse, cold surface, cold chills, and partial delirium. I learned that he had eaten but little for the past three days, but, instead, had been imbibing freely of whisky and beer, and that two hours previously had taken a spoonful of "green poison" that he had purchased at the drug store for the alleged purpose of killing roaches. The remainder of the poison not taken proved to be arsenite of copper. The vomited matters contained considerable of this green substance, showing unmistakably that enough had been taken to produce dangerous trouble.

No time was lost in producing thorough emesis with zinc sulph. and ipecac. and evacuating the bowels with ol. ricini, followed by large doses of hydrated sesqui-oxide of iron every ten minutes.

Three hours later—patient very restless, has great thirst, palpitation, burning heat of surface, small and frequent pulse, moments of prostration, and difficult respiration, great pain in stomach and bowels, and black fetid stools.

I ordered morphine to relieve the pain, and continued the oxide of iron, with rum, eggs, milk and mucilaginous drinks.

January 9th, 8 o'clock *a. m.* Patient slept but little during the night; has less pain in the bowels, has cold sweats, scanty and bloody urine, livid spots over the surface, and a miliary eruption, great prostration and occasional syncope, inflammation of the lips, tongue and mouth, cramps of the muscles of the legs, followed by convulsions.

Treatment continued with beef-essence and brandy.

4 o'clock *p. m.* Patient has insatiable thirst, but vomits every thing taken, with increased pain and distention of stomach and bowels, swelling and livid circles around the eyelids, frequent change of countenance, cold sweats, imperceptible pulse, hiccups: frequent sinking and impending death.

These active and violent symptoms gradually subsided, and were followed by a condition of prostration, which continued five or six hours, ending in death.

The Coroner held an inquest on the body of deceased, and the jury returned a verdict of death from a poisonous dose of arsenite of copper, administered by his own hands, with the intention of committing suicide. At the Coroner's inquest the following important facts were learned.

That Mr. L. the deceased had purchased January 8th, 1870. one ounce of the arsenite of copper for the alleged purpose of killing roaches; that the package was not labeled, much less having the word "poison" on it according to the statutes of Ohio. Also, that the deceased had gone to another drug store the same day, and purchased ten cents worth of arsenite of copper for the same purpose as before, and that in this instance the clerk was a mere boy, having, perhaps, no knowledge of the properties of the poison, or its value, as he gave him a scoopful without weight, and without the proper label as required by law.

CASE II.—Oct. 1870—Mrs. A—E— purchased half an ounce of the arsenite of copper for the alleged purpose of killing roaches, but, instead, she made the attempt to poison a family living in the same house with her on Main street, No. 696, by putting the poison in the coffee-pot containing the coffee being prepared for the family breakfast.

Mrs. E— was arrested and taken before the Police Court to answer the charge of an attempt to poison a family of several persons.

CASE III.—Mrs. E— F—, age forty-nine years, married. November 3, 1870, Mrs. E— F— purchased five cents worth (half ounce) of Paris green. Said she wanted to poison roaches with it, and, as it is frequently sold and used for that purpose, the druggist sold her that amount without hesitation, and without making a record of the same. The early part of the night of November 3d she was very sick, vomited some, but feigned to be better, and thus she got rid of her friends who had been watching with her, and who did not suspect the trouble. In the morning they found her dead, and evidences of her having swallowed the greater portion of the half ounce of Paris green. (This case reported by my friend, J. W. Underhill, M. D.)

In consequence of the insolubility of the arsenite of copper in water, may be one reason that it is not considered by those that sell it carelessly so dangerous a poison; but Dr. Taylor, of London, England, in his work on Medical Jurisprudence, page 125, says: "Although this compound is insoluble in water, it is sufficiently soluble in the acid mucous fluids of the stomach to be taken up by the absorbents, and carried as a poison into the blood." "The symptoms and appearances which it produces resemble those caused by arsenious acid or white arsenic."

It is very important, but generally difficult, to ascertain the exact amount taken in fatal cases. The amount taken in the cases I have reported was, no doubt, from one to three drachms.

Out of the numerous cases of poisoning from arsenite of copper reported in the different works on Medical Jurisprudence and Poisons that we have consulted, there are but two cases in which the smallest fatal dose or quantity was known.

Dr. Taylor, in his work on Poisons, page 386, reports two cases of death occurring in children from the arsenite of copper,

where the quantity taken could not have been more than two or three grains.

It is reasonable, therefore, to conclude that from five to six grains would prove fatal to adults, being about twice the quantity of the smallest fatal dose of the arsenious acid or white arsenic.

We learn from inquiry on this subject that thousands of persons in this city frequently purchase and use the arsenite of copper, Paris green, or Sheele's green, as a roach poison, and from its being easily obtained for this purpose, and then used for criminal purposes (as we have reported in the year 1870 two deaths and one attempt to poison a family), therefore we deprecate the use of so dangerous a poison for the common purposes of killing roaches. But, in doing so, we do not want to leave the public without an antidote against the pestiferous roaches, and therefore offer pulverized alum or pulverized borax as being equally efficient and devoid of danger. The alum and borax are greedily eaten by the roaches, and quickly proves fatal.

From the above cases we deduce the following facts and conclusions:

1st. That the poisonous and destructive properties of the arsenite of copper, or, as it is commercially called, Paris green or Sheele's green, is known to the general public, and hence, is used for suicidal and criminal purposes.

2nd. That the druggists do not regard it as a dangerous poison, or that they are not aware of its being used as a criminal poison, or else they disregard the State law regulating the sale of poisons.

3rd. That we recommend that druggists be as strict in regard to the sale of arsenite of copper as of other preparations of arsenic.

In connection with this subject we think it advisable to quote the present State law entitled—

"AN ACT REGULATING THE SALE OF POISONS, PASSED
APRIL 13, 1852.

"SEC. 1. Be it enacted by the General Assembly of the State of Ohio: That it shall not hereafter be lawful for any apothecary, druggist or other person in this State, to sell or give away any article belonging to the class of medicines usually denominated

poisons, except in compliance with restrictions contained in this act.

"SEC. 2. That every apothecary or druggist, or other person, who shall sell or give away, except on the prescription of a physician, any article or articles of medicines belonging to the class usually known as poisons, shall be required—

"1st. To register in a book kept for that purpose the name, age, sex and color of the person obtaining such poisons.

"2nd. The quantity sold.

"3rd. The purpose for which it is required.

"4th. The day and date on which it was obtained.

"5th. The name and place of abode of the person for whom the article is intended.

"6th. To carefully mark the word 'poison' upon the label or wrapper of each package.

"7th. To neither sell nor give away any article of poison to minors of either sex.

"SEC. 3. That no apothecary, druggist or other person, shall be permitted to sell or give away any quantity of arsenic less than one pound, without first mixing either soot or indigo therewith, in the proportion of one ounce of soot or half an ounce of indigo to the pound of arsenic.

"SEC. 4. That any person offending against this act shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be fined in any sum not less than twenty nor more than two hundred dollars, at the discretion of the court of competent jurisdiction."

One member of our section, Dr. G. B. Orr, deserves great credit in taking the trouble to inquire of the numerous druggists of this city how many observe this law by keeping a record of the sale of poisons, and he reports only one in thirty. Many of the druggists say they were not aware of any such law in existence; therefore we think that the Health Officer should be empowered to send to every druggist in the city copies of this law, and then be required to prosecute those that do not observe it.

The report was received and adopted by the society.

A CASE OF FÆTAL MALFORMATION.

By F. M. THOMAS, M. D., Samantha, O.

On the night of the 25th of February I was called to see Mrs. P——, aged about forty, the mother of five children, one still-born. I found her to be a woman of sanguine temperament, and in labor at full time. She had been in labor about six hours, but her pains were very irregular and ineffectual. After questioning her pretty closely, I became satisfied that the foetus was "still," and had been for some five days.

On making an examination per vaginam, I found the vagina moist and cool, the os uteri dilated to some extent, and in a relaxed and dilatable condition, but I was puzzled as to the presentation. It was clearly not a shoulder presentation, and as clearly not the breech that presented. But upon further examination I found that it was the head, with the occiput looking to the right sacro-iliac synchondrosis. Nothing could be ascertained by the fontanelles, on account of the malformation of the bones of the cranium. The position of the head was learned only by passing the hand up to the eyes and nose of the foetus, which was performed with the greatest difficulty.

In the space of an hour after my arrival the pains increased in force and frequency, the liquor amnii escaped, the head passed the os uteri, and the second stage of labor promised to be of short duration, but on account of the soft and pulpy condition of the head, it soon passed the os externum without dilating the soft parts sufficiently, and the shoulders being large and well formed, considerable time elapsed before the termination of the second stage. During the latter part of the second stage the mother suffered excruciating pain; but after the placenta and membranes were withdrawn, which was soon accomplished, she became quite comfortable, and remained so during the time I was with her. The child was dead. It was of the male sex and had a large and perfect form, in every particular except the head. I am sure that the child would have weighed full nine pounds. Now what seemed most strange in this case was the unnatural condition of the cranial bones. The occipital bone seemed to have been developed from at least seven centers, instead of four. The parietal bones seemed to

have four centers of development instead of one; and the frontal bone had a like unnatural number of centers. None of these fragments of bone were larger than a silver quarter dollar, and they were all entirely disconnected, and were floating loosely beneath the pericranium. I have seen several cases in my practice, in which there were slight irregularities in the cranial bones, but I have never before met a case in which the bones of the cranium seemed to be developed from so many centers, and the development arrested so long before reaching perfection.

THE FORCEPS.--TWENTY CASES OF SUCCESSFUL DELIVERY.

By J. C. McMECHAN, M. D., Cincinnati, O.

An obstetrical writer of forty years ago, in his introduction to a work on the practice of obstetrics, says: "It has often been declared that labor, being a natural act, it did not require the interference of art for either its promotion or its accomplishment; and, consequently, that when this becomes necessary, it only forms an exception to the rule." This view of the subject has had many followers, and has from its influence retarded, more perhaps than any other circumstance, the progress of improvement in this most important branch of medical science. It so entirely comported with the theories of the fastidious admirers of nature, it so completely coincided with the feelings of those whose supineness made them averse to inquiry, so effectually apologized for ignorance, and so plausibly extenuated the evils arising from neglect or the want of proper skill, as to secure in its favor the greater portion of the practitioners of midwifery.

Errors in premises must almost necessarily lead to errors in deduction; hence the too exclusive reliance on the powers of nature to overcome all the obstacles connected with parturition; hence the almost total disregard of the first and most important principles in the art of midwifery. These errors originated in ignorance, and were perhaps excusable from this cause; but how reprehensible do they become now since the powers of nature are better calculated, and the resources of art better understood. In what light, then, should we view those who still inculcate such principles, and who make the whole art of midwifery consist in doing nothing!

Were the constitutional powers of the system, the physical conformation of the pelvis, and the size of the child's head, always and undeviatingly the same; were the most favorable presentation of the child; the best construction and the most healthy play of powers concerned in the operation never to be assailed by accident or complicated by disease, the opinions of those who contend for the supremacy of unassisted nature would deserve much, and perhaps exclusive attention. But as it is too well known that this never has, nor ever can be the case, I must insist that the powers of nature have their limits, and that the interference of art sometimes becomes absolutely necessary.

Some practitioners may say they never used the forceps in their lives, but do they deserve credit for this? They may have been extensively employed and very lucky (for it is nothing more,) without even knowing how to apply instruments. But suppose the pelvis was faulty, the mechanism of labor obstructed, or the powers of the uterus impaired, would they not have to wait in vain for the powers of nature to relieve the patient?

Many physicians and authors, since the invention of the forceps, about the year 1666, have spoken and written against their use. About the first to cry out against the utility of these instruments were Daventer and Le Motte, who were most earnest in condemning the use of instruments; and Daventer was so egotistical as to say he could terminate the most difficult labor with the hand alone.

The first teacher of the science of midwifery in England, Dr. Maubry, wrote a book in 1723, entitled, "The Female Physician, or the whole Art of New Improved Midwifery," and in this work he spoke very severely against the use of all instruments, but especially the forceps.

About the year 1760 a female physician, Mrs. Elizabeth Nibell, wrote a work entitled "Art of Midwifery," in which she refers to the many abuses practiced in the obstetric art, but pronounces most of her invectives against the forceps. She attributes to them all the misfortunes of difficult labors; but is so candid as to acknowledge she never used them herself, as they were not within the sphere of her practice.

Since the time of the last named writer, many have been the invectives pronounced upon the forceps; and such is the prejudice, even at the present day, that many practitioners speak

against their use, and sing that old, old song about trusting to nature, and if nature fails to relieve the patient *she must die*.

These practitioners do not keep their peculiar views to themselves, but instil them into the minds of their patients, so that in cases of necessity for the use of instruments, the patients are so much opposed that it is difficult to gain their consent. Only two weeks ago I was called at three o'clock, P. M. to see a woman in labor. A midwife was in attendance, and had spent with the woman three long, tedious nights without sleep. The woman had suffered with labor pains for three days and nights, and even at the time I was called in, the midwife was opposed to sending for a physician. The head was found, on examination, to be in the third position of the vertex. The posterior fontanelle was under the pubic arch, and the head was at the inferior strait, resting against the perineum. It had undergone three of the phenomena or stages of the mechanism of labor—that of descent, of rotation, and of flexion. The head was so strongly flexed, and the perineum so rigid, that the pains had not sufficient force to extend the head and terminate the labor. After remaining with the patient for half an hour, I proposed to deliver with the forceps; but my proposition was received with what might be designated a howl from the half dozen women present, all of whom displayed the strongest indignation at the very idea of my proposing such a thing. I left the house then, stating that I would return at 8 P. M. At the appointed time I returned, and remained two hours. The pains were as ineffective as ever, although quite strong. I tried to impress on all present the necessity of the delivery, but all to no purpose. I then told the husband I would go home, and if they concluded to have the woman delivered with the forceps, to come after me; but unless his wife fully made up her mind to be delivered in that way, I would not visit her again. About three o'clock A. M. I was sent for, and on arriving found the woman suffering with pain, but the head in the exact position it was in at ten P. M. I got the woman in proper position, applied the forceps, and in a few minutes delivered her of a living child. There was not a mark on the child's head, and all present were surprised to think the instruments were used and the child not killed.

A case just the opposite of the one related in regard to the patient's willingness to be delivered with instruments, and which

goes to confirm a remark made by Madame Lachapelle, that she has often known persons in their second labor to solicit the application of the forceps, having experienced the relief they afforded in the first, occurred in my practice a few months since.

I was asked to see a lady in confinement, and it was about eleven o'clock P. M. when I arrived at the house. The pains were strong, and the womb well dilated. The membranes had not yet ruptured, but could be felt protruding. During the conversation which ensued after the examination I learned that I was sent for only owing to the absence of the family doctor, who was then away on a visit to New York. I also learned that the lady had had one confinement previous to the present one, and that the doctor in attendance, the family physician, had found it necessary to deliver with instruments, and that "he had used them *so nice*." All the ladies present spoke of the danger the lady had been in, of her great suffering, and the prompt and efficient relief the attendant had given.

A few hours went by, the membranes broke, and the first presentation was easily diagnosed. The head descended, but when it became flexed against the perineum it remained fixed there, and, although the pains were so excessive as to cause the lady to scream, they seemed to have no effect. After encouraging the patient, and seeing her suffer so severely for an hour longer without relief I was about to propose delivery, when the patient herself begged of me to deliver her with the instruments, which I at once did. The child was very large, and the pelvis small, which accounted partly for the labor being so painful.

In difficult labor there is no other means by which we can deliver the woman as safely and successfully as by the use of the forceps.

About the latter part of the sixteenth century Dr. Raynold, an English physician, published his book entitled, "The Birth of Mankind, or, the Woman's Book." After invoking the nine muses to breathe over his book with their poetical spirit, he advises certain passages to be read to the woman in labor that she might be comforted and relieved in her travail. His means of relief in tedious and painful labors were innumerable unguents, mollifying applications and sweet words: in plain language, he believed in coaxing the child out. A still older writer * speaks

* Mercatus de Muller, *Affect. lib. iv. cap. iii.*

of a more ridiculous means. He advised sage leaves to be given, that the woman might have an easy delivery; for it was a well-known fact that lionesses chew this plant in order to have easy labors. Perhaps the reason that such nonsensical things as these were proposed in those days, lies in the fact that the mechanism of labor was not at all understood at that time; and even if it had been, they had no forceps which could be applied to the head. It is stated that Avicenna, one of the most ancient of Arabian physicians, invented a forceps, but they were joined together in such a manner that the blades would not unlock, and of course, they could not be introduced so as to grasp the head. Another great reason that the ancients were not more skillful in midwifery is, that this practice was almost exclusively in the hands of midwives. At the time of Albucasis, who lived in the twelfth century, when it became necessary to explore the female genitals, the physician never proceeded in that research himself, but always employed the ministry of a sage *femme*, an uncertain course, which the excessive modesty of one sex, and the unbridled jealousy of another, imposed on the man of art. Even as late as the year 1663 this practice was in the hands of women, and it was only in rare cases that men were called in at all. It was in this year that the first employment of men-midwives on the continent of Europe took place. The Duchesse of Villiere, mistress of Louis XIV. of France, was the first female who was induced to place herself under the exclusive care of a professor of surgery without any anticipated necessity of a surgical operation. Julian Clement, who was in high repute as a surgeon, was conducted in disguise to the dwelling of his patient. The case terminated successfully, and he was soon after appointed accoucheur to the princesses of France.

Up to the time the forceps were invented, in all cases where the child could not be turned, or where the head was firmly fixed, the medical attendant was compelled to let mother and child both die, or to sacrifice the child to insure the escape of the mother. When such a process was necessary the attendants consoled themselves with the following quotation from Tertullian: "Atquin et in ipso adhuc utero, infans trucidatur necessaria crudelitate, quum in exitu obliquatus denegat partum, matricidia qui moriturus."*

* Meigs' *Obstetrics*, chap. xvi.

In regard to the safety of the forceps, a great deal depends on the care the attendant uses in applying the instruments, and in delivering. It is seldom the fault of the instrument when serious consequences follow their use; and, as Baudelocque remarked, it is not so much the instrument, but the hand that uses it.

The long continued pressure of the child's head in protracted labor usually does more harm than the forced delivery. Dr. Thomas* says on this point, "very often where a labor has been allowed to be prolonged in the second stage, until the vitality of certain points in the vagina has become irremediably impaired, and the process of sloughing been already inaugurated, delivery by forceps has been regarded as producing fistula. Under such circumstances the real morbid agency, prolonged and violent pressure is lost sight of, and the more palpable agents the instruments employed are viewed as the source of the accident."

Dr. Isaac Baker Brown,* of London, made a report to the Obstetrical Society of that city on the production of urinary fistula by the use of instruments. Said he: † "With regard to the causes of vesico-vaginal fistula of the fifty-eight cases admitted into the London Surgical Home, 47 were over twenty-four hours in labor, and 39 were as much as 36 hours or more; 7 were two days, 16 were three days, 3 were four days, 2 were five days, and 1 seven days.

"In the whole number of cases instruments were used in 29, exactly one half, and in four only was the labor less than twenty-four hours, and with seven exceptions the patient had been thirty-six hours or more in labor before the instruments were used. Of the 58 cases, in 24 only the injury happened at the first labor, in 7 at the second, in 5 at the third, in 4 at the fourth; in 6 at the fifth, in two at the sixth, in 5 at the eighth, in 1 at the ninth, 1 at the thirteenth, 1 at the fifteenth, and 2 not mentioned.

"From the foregoing statistics it is evident that the cause of the lesion is protracted labor, and not the use of instruments or deformity of the pelvis. As a necessary deduction from what has been stated, it follows that vesico-vaginal fistula would scarcely, if ever, occur, if a labor was not allowed to become protracted; and this is a point for the careful consideration of practitioners in midwifery."

* Thomas on the Diseases of Women, second edition, page 157.

† Obstet. Trans. vol. v. page 23.

In addition to this all-powerful evidence, Dr. Thomas says, the experience of Drs. Sims,* Emmett and Bozeman,† is confirmatory of that of Mr. Brown. Sloughing of the perineum may also occur from a too protracted labor; and Dr. Dewees‡ relates a very interesting case of the kind in which the perineum sloughed after a lengthy labor.

The four principal reasons for applying the forceps are:

1st. And this is the chief—the resistance of the perineum after the head has descended to the inferior strait, or where the head is too strongly flexed against the perineum.

2d. Where an accident occurs during labor that may cause death if not remedied, and in which version can not be performed.

3d. In cases of inclined or irregular head, or face presentations.

4th. Where there is a deformity of the pelvis, or where a disproportion exists between the size of the pelvis and the child's head.

I will not discuss each of these reasons separately, but will now pass on to notice the frequency of the applications of the forceps in different countries. According to Churchill's statistics the forceps are used—

In England,	1	time	in	351	cases.
" France,	1	"		162	"
" Germany,	1	"		153	"

Professor Boer§ states that the forceps have been used in the practice of individuals, whom, however, he does not mention, in nearly one case out of every three labors. Professor Nagele, of Heidelberg, reports that, in the practice of the lying-in institution of that city, for two years he used the forceps once in 53 cases. M. Bandelocque used them once in 353 cases. Madame Boivin once in 212 labors. At the Obstetric School of Göttingen once in 18 confinements. At the University of Stockholm, once in 100. And Professor Boer himself used them once in 238 labors.

The forceps are probably used oftener at the present day at Berlin and Vienna, than in any other cities. I have been

* Gardner's Notes to Scanzoni, page 503.

† Agnew, Vesico-Vaginal Fistula.

‡ Dewees' System of Midwifery, fourth edition, page 282.

§ Medicina Obstetrica, page 443.

informed, if memory serves me right, that in hospital practice they are used about one time in seven cases at Berlin.

Cazeaux says in regard to "the danger of the operation to the mother and child, it is difficult to estimate, for the statistics generally represent only the number of mothers and children who perished, without stating the cause requiring the intervention of art, and consequently leave us uninformed as to the probable danger of the operation in a given case. Thus the risks to which the mother and child are subjected, when the use of the forceps is demanded only by the resistance of the soft parts, is not comparable to that which threatens them when the head is arrested by a contraction of the pelvis. The length of time which elapses between the discharge of the waters and the intervention of art necessarily influences greatly the result of the operation; now, with the exception of Dr. Collins, whose statistics, though unfortunately too limited, prove that the mortality is greater in proportion to the lateness of the operation, very few authors have noted this point." Dr. Collins gives the following as regards the mothers: When the labor was terminated in 24 hours, but one woman died out of 13; between the 23rd and 30th hour there was one death for six cases; between the 37th and 48th one death in four; and beyond 48th one death in 2 cases. In natural labors the mortality was for the mothers 1 in 346, and for the children 1 in 31; in deliveries by the forceps, it was for the mothers 1 in 22, and for the children 1 in 43.

I have kept an account of the last seventy cases of labor that I have attended, and in twenty of these cases I delivered with the forceps. This may seem rather a large proportion, but in eleven of the cases I was called in to deliver women whom midwives had had under their care, and whom they failed, after long, tedious efforts, to deliver.

I will give the history of some of the most interesting of the cases, and will proceed afterwards to arrange them in a more methodical manner. On August 23d, at nine P. M., I was called to see Mrs. H.* in labor with her first child. The membrane not having ruptured, and the head being still high in the pelvis, I failed to diagnose the position. At five o'clock, A. M. of the 24th I was again summoned to the house, and the membranes having ruptured and the womb fully dilated, the sixth present-

* See Philadelphia Medical and Surgical Reporter for Nov. 19, 1870.

ation was easily made out. At nine o'clock A. M. I applied the forceps (the pains not having moved the head in the least), and attempted to deliver by drawing the occiput over the anterior commissure of the perineum, but I failed in this after repeated efforts. I then concluded to try and rotate the occiput forward under the arch of the pubis, which I succeeded in doing, the child being born alive.

On May 24th, 1870, was summoned to see a lady in convulsions. The convulsions being very severe, and recurring every half hour, from 4 o'clock P. M. till 12 o'clock at night. The usual remedies failing to control the convulsions, and the womb having slightly dilated, I ruptured the membranes. The presentation proved to be of the feet, and the child was easily delivered all but the head, which remained fixed; the usual maneuvers failing to effect delivery I applied the forceps and delivered. It is a well known fact, that in a case like this if the child is not delivered in five minutes it is always born dead. In the six months following this case I attended two more cases of puerperal convulsions. Nothing seeming to control them I ruptured the membranes, and the wombs being in proper condition delivery from the superior strait was effected in each case by the instruments.

I have now given the history of six cases, and my reasons for using the forceps; in the remaining fourteen cases the head had descended to the inferior strait, and the occiput was pressing against the perineum. In most of the latter cases the head was strongly flexed, and all that was needed to terminate the labor was a slight extending force which the instruments afforded.

In one case the labor lasted 87 hours, the membranes rupturing at the 18th hour.

In three cases it lasted 60 hours, in one of these three the liquor amnii came away at the 12th hour, in another at the 10th, and in the third at the 9th.

In five cases the labor continued 48 hours, the liquor amnii coming away from the 6th to the 8th hour.

In five cases the labor lasted 30 hours, the membranes rupturing about the 6th hour and 8th hour.

In two cases the labor continued 24 hours, the membranes rupturing at the 14th and 18th hours.

In three cases of convulsions the labor was terminated in

every case in about 8 hours, and in each case I ruptured the membranes myself.

In the case of Mrs. H. the labor was terminated by forced delivery in 14 hours after true labor pains began; and in her case the membranes ruptured about the ninth hour.

In every case the child was born alive, and did well after delivery, and the cases that lasted so long were first in the hands of midwives.

CROSS PRESENTATION.

By CHAS. A. LYND, M. D. of Cincinnati.

I was called to a case of labor about four o'clock P. M. and upon arriving at the house found the friends of the patient in great excitement. They told me that one of the child's arms had been born about three hours, but the labor had progressed no further; and that the patient had been in labor over eight hours.

At the commencement a homeopathic physician had been called in, who made an examination, and told the patient to walk about as much as she could, and left without saying anything as to the position of affairs, merely remarking that he would return in a few hours. After the lapse of something over four hours, he returned, but simply looked in at the door, —without entering—and asked if the child had been born: when told it had not, he *again left*, saying he would "return shortly."

The family being poor and unable to pay a physician, they waited *three hours* more for this man, and then sent for me.

The dangerous condition of the patient, from the prostration of her tedious, yet fruitless labor, and the presentation of the child, combining to render the case a very critical one, caused me to hesitate before resuming the great responsibility. But her necessity for immediate assistance, and her poverty appealed so strongly that I undertook the case.

I at once made an examination, and found as follows:—The right hand and arm delivered—the child lying across the superior strait, with its back to the mother's abdomen, and its abdomen towards the mother's back—the head in the left iliac

region. . Upon further examination I found the child was dead, or apparently so.

Decision and action had to be prompt, as the patient was fast sinking.

She was a well formed young Irish woman, eighteen years of age, and this was her first child. The examination showed that there was no obstruction in the conformation of the parts to the passage of a full grown foetus, properly presented.

The pains were strong,—too strong for the patient to endure much longer; as they are apt to be in such cases.

I decided to use the *hands* alone in the delivery, in preference to instruments.

I am a firm believer in the powers of Nature to rectify her own mistakes up to a certain point, and would rather wait upon her tardiness, when the case is still within the vito-mechanical law, than unduly interfere with her. But here was a case where mechanical law had overpowered or outwitted the vital law, and nature was incompetent to the task imposed upon her. Still trusting to the assistance she would probably render, I proceeded to make a *pelvic version*, and deliver by the breech.

To accomplish this I introduced two fingers of my right hand into the right axilla of the child, and made pressure upwards. at the same time, with my left had upon the mother's abdomen, making manipulations to assist the upward movement of the foetus.

I was somewhat surprised and greatly gratified at the result, it requiring but few efforts, as described above, to change the side, as the presenting part, to the back, and to bring the pelvis into such a position as to allow me to insert my finger in the flexion of the femur upon the abdomen. Placing a finger of my right hand in this flexion, I made forcible traction, at the same time grasping the head of the foetus, through the abdominal walls of the mother with my left hand, and pressing it upwards, with the happy result, in a very few moments, of bringing the pelvis as the presenting part, and thus completing the version.

Nature, to whom the work was now entirely left, accomplished the delivery of the child's body with the very first pain after the version; the head remained but a moment after the delivery of the body; and thus, in less than *thirty minutes* from the time I had entered the room, the version had been accomplished and

the patient delivered of a child that would weigh between *nine and twelve pounds*.

The uterus immediately contracted upon the placenta, which I brought away in about twenty minutes after delivery. The uterus again promptly contracted, and the patient was bandaged and given a quieting draught.

The results in this case show that, had the patient received proper attention from the one first called in, she might have been saved many hours of intense suffering, and escaped the peril in which her life was placed.

As a climax to the conduct of this doctor (?), I must not neglect to say that, he called the *next morning*!! and seeing things all right, *claimed the case as his own*, and prepared to leave some of his "little pills," when he was promptly told by the friends that they had no further use for him there.

The child, as before remarked, was a large one (a male), and well formed, but had evidently been dead some days, and lying in the uterus as a foreign body, only capable of exciting a purely mechanical action, so that a false position, a locking of the head, or any mal-position, might render this mechanical action useless, as it undoubtedly did in this case.

The mother, whom I closely watched, had no further trouble, excepting that, for several days, she appeared threatened with a psoas-abscess; but this was prevented by the free application of a stimulating liniment and warmth.

MEDICAL GLEANINGS.

TONIC ACTION OF ANTIMONY AND CALOMEL.—"Antimony impoverishes the blood." "Mercury impoverishes the blood." Such is the every day talk of many practitioners, who are led by this generalization to overlook the possible action of small doses, which may produce effects exactly opposite to larger doses. Thus antimonial and mercurial preparations—particularly the latter—when used in minute quantities, will often so impress the organs of digestion and assimilation as to produce all the effects of veritable tonics. In the *Boston City Hospital Reports*, Dr. Borland refers to this matter in connection with the treatment of pneumonia, and cites Headland and Billing in support of the tonic

power of the agents mentioned. "The capillary blood-vessels," it is maintained, "being distended in normal inflammation by the stasis of their contained blood, are reduced in size by the action of antimony on the vaso-motor nerves, the blood is propelled onward, exudation is checked, and heat, pain, redness, and swelling go away. In brief, the inflammation is summarily put an end to, and that, not by any weakening of the nerves of the capillaries, but by endowing them with more life. Any substance which does this must be described as an instrument of tone and power." Dr. Borland adds, in reference to pneumonia in the City Hospital: "Our cases treated in this way have been very satisfactory. No nausea or depressing effects of any kind have been observed, but the medicine has acted like a true tonic."

—*Pacific Med. and Surg. Journal.*

SKIN-GRAFTING.—Dr. David Page, of Edinburgh, has made some investigations (*British Medical Journal*, Dec. 17, 1870) which throw a very important and interesting light on this subject. All observers agree in describing the disappearance of the characters of the true skin in the piece laid on the wound, and the resulting appearance of a small pellicle, which ultimately becomes the center of cicatrization. Mr. Nelson Dobson, in a paper which he read at the Bath and Bristol Branch of the British Medical Association, described the excellent result from splitting fine shavings of skin into small pieces; and all authorities have agreed from the first that the skin taken should be completely free from subjacent areolar or adipose tissue. Dr. Page goes still further. Microscopic examinations into the physiological characters of the process have convinced him that "the so-called skin-grafting consists, in truth, not of a transplantation of true skin, but of epithelium." The pellicle, which retained its vitality, and proved of initial value in inducing cicatrization, was found to consist of young epithelial cells. Further, the cicatrix thus induced, and that formed by the ordinary normal process elsewhere, were undistinguishable one from the other, and, under the microscope, proved to be of the same fibro-cellular character.

Dr. David Fiddes, of the Royal Infirmary, Aberdeen, has clinically arrived at a conclusion which affords a remarkable support of Dr. Page's observations and deductions, if confirmed by further observations. He says that it is quite unnecessary to put

the patient to the pain of cutting a piece of healthy skin from the body for the purpose of transplanting it on the sore. "All that is necessary to be done," he says, "is to take a long bistoury, or razor, and shave or scrape off the epidermic scales from the convex parts of the extremities, such as the outer and convex aspects of the fore-arms and thighs, and place them on the healthy granulations. This can best be done by brushing the scales off the bistoury with a camel-hair pencil. After securing them *in situ* for three or four days by means of common adhesive plaster, the granulations on which the epidermic scales were placed assume a glazed, bluish appearance, which gradually grows into the skin, and meets the nearest edge of the healing ulcer, which edge shoots out and meets the newly-formed skin on the granulations. The result is continuity of healthy skin." This last, it will be observed, is a very important statement. Dr. Page's observations lead him to the opposite conclusion, that there is no nearer approach to the condition of true skin, than in cases of ordinary cicatrization, but only a more rapid formation and from a greater number of centres, of a tissue of very low vitality, deficient in many of the functions of the true skin, and easily destroyed by causes that would not affect the latter. The sphere of usefulness of the operation will be largely affected according as the one or other view proves to be correct. No doubt clinical observations will multiply; and we direct attention to these points as the best method of furthering the discovery of the place in surgery of this new and suggestive practice — *British Medical Journal*, Dec. 24, 1870.

DOSE OF BROMIDE OF POTASSIUM.—During the last few weeks our attention has several times been called to the failures and disappointments which are experienced in the use of bromide for nervous affections, on account of the too small dose that has been employed. The most striking of these is a case that we shall probably publish at length elsewhere; but the heads of it may be interesting here. A young lady, of great intellectual activity, suffered from a severe cervico-occipital and trigeminal neuralgia, attended with cerebral excitement and intractable insomnia, the chief cause of which was very obviously mental but which was greatly aggravated by the cold weather. Ten fifteen and twenty-grain doses did nothing for her. The dose was raised to thirty grains thrice daily, and after four of the

she fell into a sleep that lasted nearly fourteen hours, and awoke almost entirely cured, the pain not returning at all, and the mental excitement completely subsiding.

In a second case a girl at the Westminster Hospital suffered from the most frightful and frequently-recurring epileptic fits, which were threatening speedily to reduce her to dementia. It was only when the allowance of bromide was raised to 120 grs. that any impression was produced; but then the improvement was speedy and decided, the fits becoming only one-third as frequent as they had been.—*Ed. Pract.*

ACNE TREATED BY GLYCERINE.—It appears to be well established that the modes of elimination of medicines are fixed and definite; thus the kidneys eliminate the neutral salts; the bronchial mucous membrane and sudoriporous glands, volatile substances; the biliary ducts, metals. By inductive reasoning, the sebaceous glands serve as channels for the elimination of the fats. M. Gubler has endeavored to verify this hypothesis by clinical experiment, and the following facts appear to confirm it:

A young girl, affected with acne punctata, which had resisted various methods of treatment, such as borax and glycerine, applied topically, was at length treated by the internal administration of glycerine, in the dose of two dessert spoons per diem, in the hope that this substance, so analogous to the oils, would, like them, follow the ordinary modes of elimination, and in traversing the sebaceous follicles, would modify their secretion, rendering their products more fluid. The result supported the theory. From the day that the remedy was first taken, the pustules diminished in volume and number, and soon disappeared altogether. The bowels, which had previously been costive, were rendered open and regular, though the glycerine by no means acted as a purgative. M. Gubler suggests its use in cases where the cerumen has accumulated in the ear.—*Lyon Medical.*

FLANNEL AND PLASTER OF PARIS SPLINT. BY CHRISTOPHER HEATH, Esq., Surgeon to University College Hospital.—Mr. Heath describes a splint recently introduced from Germany. It is easily made, and forms an efficient substitute for the expensive and troublesome leather splint. It is made as follows:—a piece of flannel folded into a double layer is laid underneath the leg; by gathering it up on either side, so as to make its edges meet

over the crest of the tibia, and the dorsum of the foot, and cutting off what is superfluous, it is adapted to the shape of the parts. The same is accomplished for the foot-piece by cutting out the fold which results from bringing together over the middle line of the sole the opposite sides of the ends of the flannel. Then, as a guide to the next step, a line is drawn in continuation of the middle line of the sole, along the under surface of the leg, and through the part corresponding to the centre of the popliteal space. Next, the flannel being removed, the two layers are united by two lines of stitching, about a quarter of an inch apart, and one on either side of the guiding line. The flannel is then accurately replaced, and the layer adjacent to the skin pinned in position, while the outer one is allowed to drop and hang from the double row of stitches on the other surface. The outer surface of the inner layer having been spread with plaster of Paris to a depth of about two lines, the other layer is brought up on either side of the leg and foot, and accurately adjusted to the first, to which it soon becomes adherent, while the entire structure sets into a firm and solid splint. It admits of no eversion at the edges, and the coherence conferred by the texture of the flannel counteracts the brittleness and the tendency to crack spontaneously, which are liable to give trouble with plaster of Paris as usually applied. The splint can be maintained in position by bandages and strapping. The thin line of flannel, which has been kept free from plaster by the double row of stitches, and preserves its pliancy, forms a hinge, which enables the splint to be removed and readjusted as often as occasion may require.

—*Lancet*.

THE ANTISEPTIC PRINCIPLE IN SURGERY.—A letter of Dr. Saxtorph, Professor of Clinical Surgery in the University of Copenhagen published in the *Lancet* on the 27th ult., as a part of Professor Lister's communication, again revives that most urgent of all surgical questions—the antiseptic use of Carbolic Acid. It is impossible that this question can rest where it is. The averments on the one side are so strong and remarkable, and the incredulity of leading English surgeons is so general, that some decisive steps should be taken to come to a scientific decision. If we had a Royal Society of Medicine, the question would be well worthy the consideration of a specially appointed committee. In the meantime we can only receive evidence. And the evi-

dence of Professor Saxtorph is explicit, and equals in physiological interest anything published by Professor Lister, unless, indeed, it be the incorporation with a ligatured vessel of the cat-gut ligature made antiseptic with Carbolic Acid. Professor Saxtorph reports the abolition of pyæmia from his wards in the last twelve months, and says the result is certainly owing to the introduction of antiseptic treatment which he had seen practiced by Professor Lister at Glasgow. It may be objected that this result is accidental. This can not be said of other results obtained by the Professor. He details a case in which he had to open a knee-joint by a large incision, and had then much difficulty in extracting from it what proved to be a part of the head of the tibia. The operation lasted a quarter of an hour. The fingers, forceps, and different hooks had to be used. But the wound closed without any suppuration of the joint. This is attributed to the treatment, and such an uncommon result is not easily explained apart from the exceptional treatment which is thus described by Professor Saxtorph: "During the whole time I poured a stream of carbolic solution over the wound;" after the operation, "I treated antiseptically." He does not say how many compound fractures he has had, but some of them have been very severe. He has treated them all antiseptically. And they have all healed without the least suppuration in the fracture itself, and the consolidation did not take much longer time than in a simple fracture. All the amputations have recovered. There has never been profuse suppuration, and never any putrefaction. These are certainly splendid results. The abolition of pyæmia in wards in which there were cases every year, the rough handling of a knee-joint for a quarter of an hour without any suppuration, and the prevention of suppuration in compound fractures, are effects which must be explained, and which seem to have their explanation in the use of carbolic acid as recommended by Professor Lister. The abolition of pyæmia, the prevention of the process of suppuration in cases in which hitherto it has been considered inevitable, and the entire prevention of putrefaction, are all very congruous and consistent results of the same principle of treatment. Professor Saxtorph endorses all that Professor Lister has said about the necessity of minute care. "Unless you take the greatest precautions in every dressing until the wound is either healed or filled up with granulations,

you will never see the excellent results of this treatment." This explains failure to almost any extent. Professor Lister says that only faith in the germ theory will procure a thorough trial of the practice. Whatever becomes of the germ theory, the results obtained by Lister, Saxtorph and others, are new facts in surgery, or rather physiology, and must have a scientific definition.—*Lancet*.

TREATMENT OF APHTHÆ. BY EUSTICE SMITH, M. D.—Dr. Smith recommends, if *aphthæ* form, that attention be paid to cleanliness. A powder of rhubarb and jalap, with a grain of hydrargyrum cum creta, should be given to evacuate the bowels; after which the following mixture should be prescribed:

℞	Potass. chloratis,	. . .	℥ij.
	Syrupi simpl.,	. . .	℥ss.
	Aquæ ad	. . .	℥iij. M.

Sig. ℥ij. quarta quaque hora.

This must not be diluted. When attacks of acute indigestion come on in infants, with hot skin, furred tongue, thirst, vomiting and diarrhea, accompanied by griping pain, all food must be stopped, and nothing allowed but cold barley-water. The stomach should be relieved by an emetic of ipecacuanha, after the action of which a purgative of rhubarb and magnesia should be given to clear out irritating matters from the bowels. A mixture of chalk and catechu, with aromatic confection, can then be given, or the following:

℞	Bismuthi nitratis,	. . .	℥j.
	Pulv. cretæ aromat.,	. . .	℥j.
	Syrupi,	. . .	℥ss.
	Mucilag. tragacanth,	. . .	℥ss.
	Aquæ ad.	. . .	℥ij ter die.

If the diarrhea continues after the tongue has become clean, half a drop of laudanum can be added to each dose of either of these mixtures, or small doses of sulphuric acid may be given with opium.

℞	Acidi sulphurici aromat.,	. . .	℥ss.
	Tinct. opil,	. . .	mvj.
	Syrupi,	. . .	℥ss.
	Aquæ carui, ad	. . .	℥iij. ter die.

When the irritability of the stomach has subsided, milk and lime-water may be given, but with caution, lest the vomiting return.—*Half Yearly Abstract*.

BROMIDE OF POTASSIUM TO PREVENT THE NAUSEA FOLLOWING THE USE OF OPIUM. By J. Y. DALE, M. D., of Lemont, Pa.—In May, 1870, I was called to see an old lady who was suffering with lumbago. The pain was excruciating, and the least attempt at movement caused intense agony. Not having my hypodermic syringe with me, I gave her the third of a grain of morphia by the stomach. She recognized the medicine by its taste, and said that the sickness it caused was almost as bad as the pain; for on several previous occasions she had taken morphia, and each time the nausea was very severe, and continued for a week. I prescribed smaller doses to be given at intervals during the night, if necessary, in connection with other treatment, and on my return next morning, found the pain much mitigated. She begged for something to prevent the nausea, and I could think of nothing that would be so likely to have this effect as bromide of potassium; so by way of testing its virtues in this respect, I prescribed ten grains to be taken every three hours, with directions to continue the morphia in one-eighth of a grain doses if the pain were severe enough to require it. Convalescence was rapid; in two days my patient was able to walk, and not a single unpleasant symptom manifested itself. I have since used the bromide where there was the same idiosyncrasy in regard to opium, with similar good results.

THERAPEUTIC VALUE OF CHLORIDE OF AMMONIUM.—Dr. William Cholmeley states (Transact St. Andrews Med. Grad. Asso.) that during the last fifteen years he has been in the habit of employing this medicine in cases in which he deemed it appropriate, and among them are: 1. Some forms of neuralgia of the fifth pair, especially those occurring in women beyond twenty years of age, whose strength has been overstrained by rapid child-bearing, prolonged suckling, anxiety, want or overwork. In doses of fifteen to twenty grains, given three times a day, the pain, which is usually of a dull, aching character and intermittent, is quickly relieved, and ferruginous tonics may then be prescribed. 2. In some cases of more genuine tic-doloroux, and in hemicrania, it is invaluable. 3. Nervous headache, such as occurs in some patients after any violent emotion or strain of the nervous system, is readily amenable to the same doses mingled with chloric ether. 4. It is serviceable also in cases of myalgia, such as affects those whose work requires long maintenance of one

position. 5. In sciatica, given in the same doses, in every four or six hours. 6. In lumbago. 7. In the painful sequels of rheumatic fever, and states analogous to this affecting men who are overworked. 8. Dr. Cholmeley considers it finally to have a powerful emmenagogue influence in cases of amenorrhœa occurring in delicate and nervous girls and women, especially when this has occurred after exposure to cold and wet. In such cases it may be advantageously combined with the perchloride of iron. It is also beneficial in cases of dysmenorrhœa occurring in highly nervous or rheumatic patients, and in the various ailments that accompany the change of life in women.—*The American Practitioner*.

. **MANAGEMENT OF THE PERINEUM IN LABOR.**—Dr. Goodel, Clinical Lecturer on Diseases of Women and Children in the University of Pennsylvania, treats of this subject historically, with reference to authorities as to clinical experience, and on scientific grounds. Some of the highest authorities on the continent and in Great Britain condemn *supporting* the perineum. Professor Taylor, of Bellevue, states that as many lacerations occur in the practice of those who support the perinium as in that of those who do not. Both experience, negative and positive, and reason unite in denying this supposed duty of the accoucheur. It may be mischievous too by impairing the vitality of the perineum, the pressure of the hand preventing the free circulation of blood; or the expulsive pains may be increased by reflex irritation at the very time when it is desirable they should be curbed, lest too rapid delivery before adequate dilatation of the vulval orifice should occur. The vast majority of natural labors require no assistance whatever, provided frequent *touching* has not taken place. Whenever it seems proper to aid nature, insert one or two fingers of the left hand into the rectum, the woman lying on her left side, with her knees well drawn up and separated by a pillow, and hook up and pull forward the sphincter ani toward the pubis. The thumb of the same hand is to be placed upon the fetal head, scrupulously avoiding all contact with the fourchette. The right hand assists the thumb in making the head hug the pubis, or in retarding its advance. After a pain it presses back the head from the perineum, and thus represses reflex uterine action; it restrains the movement of the woman; it pushes up the corrugated scalp, so that no folds shall remain

beneath the sharp edge of the perineum to increase the circumference of the child's head; finally it supports the emerging head and body, causing them to describe the curve of Carus.

Where forceps are used in order to avoid rupture of the perineum, as soon as this part is well distended the instrument is removed—unless the removal requires a force which might accelerate delivery—and labor left to terminate unassisted, or the head enucleated as previously mentioned.

Incision of a rigid perineum is not necessary, except the rigidity be caused by extensive cicatrices from burns, sloughs, abscesses, etc. In case rupture occurs, introduce metallic sutures at once; use the catheter for a few days, and the rent readily closes. All greasy substances applied to the maternal passages for the purpose of promoting dilatation are mischievous.—*The American Practitioner*.

NUX VOMICA IN THE DYSPESIA OF HYPOCHONDRIACS.—*En Fait de Therapeutique*.—There are, as always, one or two items or suggestions worthy of being placed in the budget. Prof. Trastour, of Nantes, has occasion to highly praise the employment of nux vomica in all forms of atonic dyspepsia, and especially as a relief from the painful digestions so common among the hypochondriacs. His theory is based upon the two facts, that nux vomica stimulates and regulates the activity of the spinal cord, especially in regard to its reflex action, and that the integrity of the functions of the grand sympathetic is subordinated to the regular accomplishment of the functions of this part of the nervous system.

The following is a useful formula :—

R	Pulv. nux vom.	.	.	.	1—4 grammes.
	Pulv. cassiæ lignæ	.	.	.	2 "
	Carb. calc. or carb. mag.	.	.	.	2 "
M.—ft.	pulv.	20.			

One powder at the beginning of each meal, in unfermented bread.

M. Trastour, like many of his confreres, prefers nux vomica to the salts of strychnine, both on account of its innocuousness and its efficacy in dyspepsias.—*Med. Record*.

PRESCRIPTION FOR PRURITUS.—It is said that no remedy is

comparable with this acid, in pruritus of the genital organs of both sexes prepared thus:

R	Alcohol,	. . .	℥vi.	
	Acid Hydrocyan	. . .	℥iss.	M.

S.--Apply to the parts twice or thrice a day.

We know this to be good in this very annoying and troublesome affection. Dr. Thompson says that no expedient is so salutary for the intolerable itching of erysipelatous and erythematous eruptions, as a solution of prussic acid, which may be made by adding one or two drachms of the acid to a pint of water. Another lotion used by Dr. Thompson is made in the following manner:

R	Acid Hydrocyan,	. . .	℥ii.	
	Acet plumbi,	. . .	gr. xvi.	
	Alcohol,	. . .	℥ss.	
	Aquæ dist.	. . .	℥vii.	M.

S.—To be applied three to four times a day.

CROTON OIL IN SCARLATINAL DROPSY.—Dr. Liddell states that in case of dropsy following scarlet fever he has obtained highly satisfactory results from one eighth to a quarter of a drop of croton oil, repeated every two hours until free purgation is produced. He administers it daily until the dropsical symptoms subside.—*Am. Practitioner.*

INDIAN HEMP IN MENORRHAGIA AND DYSMENORRHEA.—Dr. Silver (in the Medical Times and Gazette,) recommends twenty-five minim doses of the tincture of Indian hemp in these affections. The remedy is especially adapted to the functional variety of these diseases.—*Am. Practitioner.*

FATTY DEGENERATION OF THE HEART--ANGINA PECTORIS.

By RALPH S. GOODWIN, M. D., of Thomaston, Conn.

It happens not very unfrequently that during the inhalation of chloroform, before very much of the anæsthetic has been administered, the patient is suddenly dead, and all efforts at resuscitation are vain. The autopsy shows fatty degeneration of the heart. So difficult is the diagnosis of this fatal condition, that a faithful inquiry into the previous history of the case, as well as a thorough auscultation before giving chloroform, may have failed to detect any cardiac lesion. So, too, during the

career of a slow fever or of any acute inflammatory disease, producing *per se* only moderate exhaustion, the patient may die from this affection, leaving the friends and physician astounded, and wholly unable to account for the sudden disaster. The clinical history and diagnosis of this disease are so obscure that the physician may be unreasonably censured by thoughtless and prejudiced persons, for lack of skill and for prognosticating speedy recovery when death was so near at hand. The best answer to such unjust imputations is the revelation which the post-mortem examination is sure to make. Death, however, will rarely occur in such cases without some preliminary warning. A train of premonitory symptoms, slight though they may seem, will lead the close and thoughtful student to suspect this lesion, which is a very grave complication in any disease that we may be called upon to treat. The truth of this remark is illustrated by the following case:

Mr. H., æt. 59, weight 160 lbs., of good habits and health, slightly inclining to obesity, was taken sick Oct. 17th, 1870. I was called to see him for the first time on Oct. 18. He stated that he was *bilious* and wanted *physic*. I at once recognized his case as one of remittent fever, similar in all respects to many others of a malarial origin which I have seen and treated during the past season. The symptoms of this case from that day till Oct. 30, were only those which usually accompany fever of a remittent type, viz: Daily exacerbations, slight chills, dry and furred tongue, etc. The pulse ranged from 75 to 100, with no intermissions nor great feebleness. The appetite was gone, the urine highly colored and somewhat suppressed. There was no delirium nor diarrhea. The strength of the patient was not unusually exhausted, he being able to sit up for a few minutes each day. On the 30th he was seized with pain of a neuralgic character, in the hypochondriac region, on both sides of the chest, and radiating in various directions. This pain occurred in paroxysms upon any slight change of position in bed, and was accompanied by considerable dyspnœa, with mental depression and a fear of impending death. I made repeated examinations of the heart, but could detect no abnormal condition, except diminished intensity of the first sound heard over the apex. The rythm was perfect and the rate about 80 per minute. These paroxysms of *angina pectoris* occurred at intervals of variable length, and gradually decreasing in frequency until Nov. 4th, when they disappeared altogether. They were regarded, in the absence of any discoverable heart lesions, as of no very grave significance. The patient's strength and appetite now seemed to improve. The pulse fell to 70 and was not very notably weak. The tongue became clear and moist, the mental depression was gone, and a speedy convalescence was looked for by all.

The patient had now no dyspnœa, and complained of nothing

except coldness of the extremities. His condition seemed to improve slowly till the 9th, when he died suddenly, in great pain, with only a few minutes' warning.

In the treatment of the case, the only remedies used throughout, were quinine, carbonate of ammonia, opium and whisky. At the time of his death he was taking two grains of quinine every eight hours, and a few ounces of whisky daily.

An autopsy being requested, was readily granted, and 30 hours after death, assisted by my friends Drs. SALISBURY and WOODRUFF, I proceeded to make the examination, with the following results:

Rigor mortis was well marked. There was no perceptible emaciation, but there were abundant deposits of fat in the walls of the abdomen and chest. The bowels were in a perfectly natural state. The lungs were normal. There was no unnatural effusion in the pericardium; the heart was not ruptured. The liver was normal—kidneys not examined. On removing the heart, its muscular tissue was found to be extensively degenerated. The right auricle and ventricle were one mass of fat. The muscle at the apex of the right ventricle had only the thickness of coarse paper and was only a little thicker at the base. The degeneration had commenced also in the left ventricle, but had not proceeded to so great an extent. The muscle was of a pale yellowish color and broke down easily under the finger. The cavity of the heart was empty and all its valves were perfect. The weight was barely nine ounces. Microscopical examination of the muscular fibres revealed oil globules and obliteration of the transverse striæ.

The post-mortem appearance in this case seem to indicate—

1st. That the *right* side of the heart may be the principal seat of this lesion, while the left ventricle, the part usually most affected, may remain so far unimpaired as to keep up the general circulation with tolerable regularity and force till the last moment of life.

2nd. That death may take place in this disease not from rupture, nor from paralysis, occasioned by over distention of the cavity by blood, but simply from *sudden and total loss of contractile power*.

We may be admonished to be guarded in our prognosis when during the career of any exhausting disease in aged persons, symptoms of notable deficiency of heart power are detected, even though no diagnosis can be made of any cardiac lesion.

The *Medical Investigator* says that Castile soap is as good a tooth paste as can be used for cleaning the teeth. The taste soon becomes unobjectionable.

SPINAL IRRITATION.

By LEWIS H. WATSON, M. D., Grand Rapids, Mich.

Truly in all our studies we meet no term so indefinitely and so inaccurately used as indicating any particular pathological condition, as the term "Spinal Irritation." If I shall be so fortunate in my brief consideration of it to add anything to the literature of the subject, I shall feel well repaid for any labor incurred in the investigation.

It has been denied by eminent authority that any such affection as spinal irritation really exists. Professor William A. Hammond, in the *Journal of Psychological Medicine*, says: "My own opinion is that there is a well defined disease of the spinal cord, which, if designated by its pathology, may properly be called spinal irritation, but which, in a system of nomenclature based upon morbid anatomy, would properly be called 'spinal anæmia.'"

Dr. Charles Brown, of Glasgow, cautions us against confounding this complaint with certain organic diseases of the vertebræ and spinal cord, which some of its symptoms cause it to resemble. His views of the pathology of the disease are these—"that the immediate cause of the pain of the back and breast is spasm of one or the other of the muscles arranged along the spine, altering the position of the vertebræ and causing compression of the nerves as they issue from the spinal cord. That this spasm is strictly a local disease, produced by wrong position, fatigue, or other causes, and quite unconnected with disease of the brain or spinal cord." Further, "that this pain is confined to those portions of the spine where there is greatest motion, the muscles of those parts being more liable to deranged action or spasm." Mr. Tate attributed many hysterical disorders to spinal irritation.

Mr. Skey regards all cases of spinal irritation as hysterical. Dr. C. F. Taylor, of New York, in a paper published in the *Transactions of the Medical Society of the State of New York*, says: "I make use of the term 'spinal irritation' in order to condemn it. It indicates no lesion, describes no pathological condition, is vague, indefinite, and incomprehensible." He believes the sensitiveness to touch to be muscular, arising from an extreme susceptibility of the nervous system.

Dr. W. Griffin, of Limerick, and his brother, the surgeon, published a joint work on the subject, analyzing 148 cases, from which they deduce these pathological inductions, which I will sum up as follows: That tenderness of one or more points of the spine is an attendant upon almost all hysterical complaints; that many of these symptoms depend upon peculiar states of certain nerves; that there does not appear to be a complaint to which the human frame is liable which may not be increased in

irritated states of the spinal cord; that those functional disorders connected with spinal tenderness are very often attended by some disturbance of the uterus, but by no means always so: that we have reason to suppose spinal tenderness to arise from uterine disorder, dyspepsia, worms in the intestinal canal, or from irritations due to local injury; and that it is met with more frequently in the situation of the 8th or 9th dorsal vertebræ. In Dr. Hammond's paper he tells us that Fuerck regards the origin of spinal irritation "due to disorder in some other organ, and the impression conveyed along the incessantly excited nerves to the spinal cord; or, second, to some derangement of the capillary circulation of the cord."

I have now passed in review the opinions of the best authorities on the subject of the existence of a derangement of the spinal cord. At the beginning of this paper I deprecated the wild, sweeping manner in which the term "spinal irritation" is used by physicians. Whenever tenderness of the back is found together with certain obscure functional disorders, the wise physician opens his mouth and we hear the oracular announcement, "Spinal Irritation."

Under cover of this declaration he proceeds *secondem artem*, to blister, leech, cup, purge, and drug the poor unfortunate, until utterly discouraged and disgusted, the patient either refuses all treatment, or else, in the vain search after health, runs the gamut of all the "ologies" and "pathies," and settles down into a miserable invalid, anathematising all doctors, and holding the settled conviction that there is no cure for this unaccountable disorder. Now, although I speak very strongly in relation to the indiscriminate use of the term, spinal irritation, I do not mean to be understood as ignoring the fact of the existence of a definite lesion of the spinal chord, to which, when properly understood, the term, spinal irritation may be given. Prof. Hammond recognizes this morbid condition, and employs the term "spinal anæmia" to designate it. But I prefer the discriminate use of the term spinal irritation.

How shall we recognize spinal irritation, and how treat it? What are the functions of the spinal cord; what use does it subserve in the animal economy? In the first place the spinal cord is the seat of the reflex functions by which the automatic movements of the body are regulated. At different points in the spinal tract, bundles of nerves are given off. If the cord be cut across at any one of these points, a complete abolition of sensation and voluntary motion is the result; the same is true with *diseases* of the cord at this particular point. For instance, let us suppose some injury of the cord along the cervical vertebræ: the respiratory movements which, to a certain extent are under control of the will, are also involuntary; the diaphragm and intercostal muscles by which the respiratory movements are carried

on, are under the control of the phrenic and third and fourth spinal nerves. If by any injury these nerves are paralyzed, respiration is suspended and death takes place by apnoea. The same occurrence takes place with *disease* of the spine at these points.

As an example of the reflex action of the spinal nerves, we know that worms in the intestinal canal will produce convulsions, also sometimes the prick of a pin in children. These are eccentric causes operating upon the spinal cord. Now, as different parts of the cord preside over different functions, and the nerves which convey influence to and from the brain leave the cord at different parts of its course, it follows that morbid phenomena must vary with the part of the cord affected. Every physician recognizes the fact that certain conditions exist in connection with different organs—not yet inflammatory, still productive of morbid phenomena—conditions which we call irritability of the organ. We have an irritable uterus, an irritable stomach, and irritable intestines. We have various diseases of the cord, such as myelitis, spinal meningitis, dropsy and tumors of the cord—all productive of disordered conditions of various organs. When we consider that from the spinal centres flows an influence which is requisite to sustain the various organic functions in a healthy conditions, it can be well understood that any interference in the proper discharge of these functions, resulting from any excess, defect or perversion of their action must necessarily engender disordered functional action in those organs contiguous to the parts affected. The evidences of functional spinal disorder are those afforded by pressure upon the spinous processes, where there is no reason to suspect spinal meningitis; namely, when pressure upon one part produces pain and not along the whole course of the cord; when we find pain upon pressure and no pain when the pressure is removed; when there is a uniformity between the spinal tenderness and those organs governed by the spinal nerves given off from that part. Various obstinate dyspepsias, asthmatic troubles and affections, as well as diseases of the bladder, uterous, and intestinal canal appear to be dependent upon this condition. This symptom of tenderness of the spine has been so often found associated with various disorders in different parts of the system, which have yielded to the treatment directed to the seat of it, and that it has come to be recognized as characteristic of a peculiar affection to which the name *spinal irritation* has been given.

As I have before stated, Prof. Hammond considers this peculiar condition to be the result of an anæmic state of the cord, and designates it by the term “spinal anæmia.” The protean manifestations of spinal irritation, and the great liability that exists to mistake some of the reflected disturbances produced by this irritable condition of the cord for other and more serious organic disorders, render the diagnosis of this condition extremely

necessary. There is scarcely an organ of the body that is not made the scape-goat upon which these great nerve centers play off their "high fantastic tricks," and thereby mislead the attending physician into dosing his patient to cure a disease far removed from the organ manifesting the disturbance. Diagnosis: 1st—This tenderness confined to particular localities and its disappearance when pressure is removed, so different from myalgia, or common "back ache," and also freedom from fever; 2d, in inflammation of the cord we have paralysis of the bladder and atrophy of muscle, none in spinal irritation. Dr. Hammond mentions another point in diagnosis afforded by the use of certain medicines. Dr. Brown Sequard states that ergot produces a contraction of the blood vessels of the spinal cord and its membranes, and therefore diminishes the amount of blood circulating in those organs. The use of ergot aggravates the spinal trouble, while on the contrary, strychnia introduced into the system through the stomach, or hypodermically, is an efficient means in the cure.

Whatever tends to interfere with the nutrition of the cord and deprives it of its proper excitant, pure blood, tends to produce this condition of irritability. Romberg says, "it seems as if pain were the prayer of the nerve for healthy blood." Two-thirds of our cases of spinal irritation occur among women, and generally among those more favored by fortune than the poorer classes. It is among our elegant, graceful, intellectual, "*spirituelle*," American women we find spinal irritation most common. The more impressionable the woman, the more highly wrought her nervous organism, the more liable to these spinal disorders.

Dr. Hammond gives us a rule for treatment: 1st, to remove the cause; 2d, to improve the general tone of the system; 3d, to increase the amount of blood; 4th, to set up a counter irritant action in the vicinity of the disordered part of the cord. Counter irritation in feeble delicate women requires caution. I would add, I have found simple friction over the part affected, steady persistent rubbing for at least an hour once a day, continued for weeks, to tone up the nervous system. As adjuvants, the nerve tonics,—notably, arsenic, strychnine, phosphorus, quinine, and iron, will be found indispensable. Especially are the influence of cheerful society, freedom from anxiety, and rest necessary.
—*Michigan Med. Jour.*

AN AMERICAN SURGEON IN THE PRUSSIAN SERVICE.

From the *Nation* of Nov. 17, 1870. By R. S. D.

These days of breach-loading rifles and murderous mitrailleuses have proved clearly that a change and augmentation of the surgical forces of armies are required, and that the old quota

of surgeons, apportionment of assistants, and allowance of supplies can no longer meet effectually the increased demand for their services in the care of sick and wounded soldiers. The Prussian army in a battalion of infantry (1,000 men) has two surgeons. There are consequently six surgeons in one of its colossal regiments of 3,000 men, or one surgeon to every 500 men. In the cavalry and artillery the proportion is somewhat greater. A regiment of cavalry (about 600 men) has three surgeons; a battalion of artillery (about 500 men) has also three surgeons. This has always been considered a liberal equipment; but the field-hospitals, in the terrible battles which succeeded each other, with scarcely an interruption, from the 4th to the 31st of August, have been found, as all the world knows, woefully inadequate; and the fact that there are at the present moment more than two hundred extra surgeons added directly to the army, as well as an innumerable swarm of volunteer surgeons and assistants of every degree of importance and usefulness, shows how great the deficiency has been. Private Prussian practitioners of skill and repute have been induced, by the solicitation of the Government as well as their own humanity, to join the army, and high special commissions have been created for them. I met in the hospital where I was engaged at Pont-a-Mousson, German, English, American, Austrian, Swiss and Russian surgeons. The Swiss Government sent thirty of its own army surgeons to the field, fifteen to the German and fifteen to the French side, and valiant service they performed during those terrible days in August when the world stood amazed at the unprecedented slaughter.

The total number of surgeons at the present time employed in the army approaches 3,000, while it is ordinarily less than 2,500. An army corps of 40,000 men has sixty surgeons and provisions for twelve field-hospitals, each accommodating 200 men, and supplied with five surgeons, about thirty *Krankentraeger*, or bearers of wounded, and a proportionate number of nurses, assistants, ambulances, and carriages of supplies. Each field-hospital moves with the army, and is charged with care of the wounded as they come directly from the field. One-half of the surgical force station themselves in action directly in the rear of the army, and do for the wounded whatever the emergency may require before they can be sent to the second station, which is more permanent, and where large operations are performed. Here blood flows freely, and suffering is dire; and the red blouse with which the surgeon envelopes his uniform is sadly significant in its hue. The remainder of the surgical force of each field-hospital is here employed, and here the wounded are retained until their removal is dictated by prudence or demanded by necessity—more often the latter; for after many of the recent battles there has been no possibility of finding shelter or beds for the

wounded still lying on the field, until some of the neighboring buildings used as hospitals (churches, barns, farm-houses, or inns) could be evacuated by the transportation across the country, in trains of open wagons, of all soldiers whom it was possible to remove. The cold and rainy weather, of which we had so much, made this journey doubly painful and disastrous: and the number of wounded soldiers who have breathed their last upon the straw, jolting across the country in those wagons, if it could be exactly known, would form a sadly eloquent commentary on the sanitary and surgical supplies of the army. Nothing, however is to be said in disparagement of the merits of the army surgeons: their zeal and ability are too well known to need any confirmation from my pen, and the misfortunes of the wounded were such as no human foresight could have anticipated or prevented.

You will perhaps allow me a few words on German operative surgery and surgical appliances as compared with those of our own country. The Germans are pre-eminent in deep investigation, skillful theorizing, and thorough information; but I endeavor to be perfectly candid when I say I have seen nothing which led me to think less highly of the surgeons and surgery of America. One who has seen and studied practical surgery in any of the chief American cities will look in vain for the order, the skillful manipulation, the rapidity and brilliancy to which he is accustomed at home; and these are not compensated for by any diminution of the sufferings of the patient or increase in his safety. The operating room, during the performance of an operation, is a sort of Babel. The preliminaries do not seem to have been arranged, the instruments are beyond the reach of the operator, and no one person is charged with the duty of handling them. When he calls for an instrument, several of the bystanders simultaneously attempt to comply with his request. Those who look on discuss the various steps freely and in loud tones, and offer any suggestions that occur to them. Their instruments, though made of far finer material than we get in America, are clumsy in appearance and construction, and awkward for the hand. The American models of the more common instruments exceed them by far in elegance and neatness. They know little concerning many convenient, ingenious and tidy contrivances which are considered indispensable in England and America; and it is amusing to see the lofty indifference with which they listen to any suggestion of the possibility of methods or apparatus superior to their own; for there is in the average German disposition the least perceptible leaning toward illiberality when other countries, as compared with Germany, are in discussion. A comparison of the hospital wards of the two countries in the respect of convenience, neatness and order, would result favorably, I am certain, for America. Indeed, they

concern themselves little about externals in surgical matters, while these necessarily engage the first attention of the observer; and for this reason this first impression is the most unfavorable; yet, if one looks more closely and studies a little deeper he finds that the essentials are never neglected, and that the *results* are perhaps all that could be expected.

I say all this after making every allowance for the exigencies of war in the enemy's country, and I do not speak of surgeons or hospitals that are exceptional, but of men of the highest reputation, and the hospitals under their charge, in the large towns of France like Pont-a-Mousson and Nancy, where every facility is at hand for furnishing completely the hospital, and providing amply for the care of the patients. And there is now no longer any lack of provisions of any sort for the welfare of the wounded. The depot of supplies, under the direction of the Johanniter Ritter Society at Saarbruecken, has been enabled, by the liberal contributions from every part of Europe, as well as America, to meet every demand for materials required by the hospitals in the vicinity of Metz, which were at first so numerous and so crowded. The Sisters of Mercy attend fully, faithfully, and without intermission to the care of the patients.

RADICAL CURE OF FISTULA IN ANO WITHOUT THE KNIFE.

By EDWARD C. HUSE, M. D., Rockford, Ills.

A prompt and successful result, in several cases of anal fistule treated by injection of iodine, has induced me to call attention to this subject in the RECORD.

While disclaiming, of course, any originally for this *plan* of treatment, the *manner* in which I have employed it is probably somewhat new. At all events, it has thus far been entirely and permanently successful in my hands; and the suggestions of M. Henry, assistant to M. Bonnafont, as long ago as 1858, on this subject, seemed to have met with undeserved neglect.

The iodine should be employed in the form of a *saturated ethereal* tincture. Its advantages over the officinal or alcoholic tincture are obvious. It is not only *stronger*, and thereby excites inflammatory adhesion in the walls of the tube, but the ether evaporates almost momentarily, and a pure coating of iodine is left along the fistulous track, which doubtless encourages absorption.

The instrument I have used is an ordinary hypodermic syringe, with small silver canula, which may be readily bent to correspond with the direction of the sinus.

The mode of operation is as follows:—After exploring the fistula with a *very small* probe (the ordinary probe of the pocket-

case is far too large,) after determining its course and extent, the patient is to be placed in a good light and a glass rectal speculum introduced, with its fenestrum opposite the internal orifice of the fistula. The canula is now bent to the required curvature and introduced, when the syringe, filled with tepid water, is screwed on, and the surface thoroughly cleansed of all extraneous matter. This step is not only essential, but serves to allay timidity, or dread of the subsequent operation.

Next, by pressure, the fistula in its whole extent should be dried out, and the iodine will thus come in direct contact with its walls. Introduce now into the speculum a quantity of carded cotton. This will absorb any of the iodine which might otherwise be injected *through* and injure the mucous membrane, and by its characteristic stain will serve to show the completeness both of the fistula and of the operation.

The canula may now be re-inserted and the injection made. It should be done *slowly*, and at the same time the canula gradually withdrawn. Every part of the surface will thereby be reached.

The operation, which is not very painful, should be premised with a cathartic and followed with a full anodyne, as ordinarily with the time-honored knife method. The patient need not be confined to his bed, or room, even for an hour.

Thus far I have performed this operation four times, and, as remarked above, with immediate and complete success. The patients were, all but one, below thirty years old. One was tuberculous, but no appreciable injury accrued from thus checking what we were once told is in phthisis a conservative drain. In my first case, a clerk, æt. 23, there was a dense and almost cartilaginous state of the fistulous wall, and the injection had to be repeated; but in the others one "sitting" alone was called for.

EMBOLISMIC ORIGIN OF TUBERCULOSIS.—Dr. E. G. Janeway, of N. Y., writes:—Recently in examining the pia mater in a case of tuberculous meningitis, I encountered a small artery one-thousandth part of an inch in diameter, containing an embolus smaller than the calibre of the vessel, loose in its channel, and about one five-hundredth part of an inch in length. It was made up of shrivelled and closely packed cells with fatty granules. The cellular nature was apparent at the sides and extremities, and was partly open to red blood globules. There was no obstruction of the larger arteries by thrombus. The lungs contained cavities and were in a state of fibrous induration. This is simply an isolated fact; but in view of the supposed embolismic origin of tuberculosis is of some importance, and may serve to make other observers investigate the condition of the small arteries more carefully in cases of tuberculosis.

OHIO MEDICAL COLLEGE.

The Semi-Centennial Commencement of the Ohio Medical College took place March 1st. The exercises incident to the annual Commencement were held in College Hall, on Walnut street, in the evening, in the presence of quite a large gathering of ladies and gentlemen.

After prayer by Rev. Mr. Elliott of St. John's Episcopal Church, Professor Wright delivered an address on the history of the College.

The Doctor closed by mentioning the names of the Professors of the College from the time of its organization, and giving the graduates some wholesome and kindly advice as to the practice of their profession.

ADDRESS OF PROFESSOR JAMES T. WHITTAKER.

The Alumni Address, of which the following is an abstract, was delivered by Professor James T. Whittaker.

The address commenced with an allusion to the deep sea soundings, and the eclipse observations in general science, and a reference to the discovery of the migration of the blood cells in medical science, as all experiments resulting in conclusions at variance with pre-existing knowledge. So marked and disturbing were the results of experimentation in every department of science, that it had already become trite on public occasions to invoke the mace of the iconoclast as the symbol of our age.

The speaker contended, however, that reckless image-breaking was not our characteristic. The demolition of our age was not wanton, as the ruins reveal but plaster crushed.

The pre-eminence of the present over the past was due to the fact that we speculate less and experiment more. Results of speculation and theories were always vague and indefinite; of experiments exact and positive, and easily verified. This explained the daring of investigation and the courage with which its results were maintained, exhibited alike in the illustrations cited.

Prof. Whittaker continued:

It is in this regard that we stand *SUPER ANTIQVAM VIAM*, and in acquiring facts instead of words in learning the substance of things, instead of their semblance, the boy is become father to the man.

It matters little how it be spoken, be it but the voice of nature. No more of truth is conveyed to Lockyer in the brilliant scintillations of circumsolar spheres than to Cohnheim in the transit of blood cells in a tad-pole's tail. An 'unconsidered trifle' of hers outweighs a volume of Socratic aphorisms.

It is now claimed that if we can establish the paramount importance of experimentation in the discovery of truth, it is a just conclusion to claim it as the best method of the impartation of truth. There is no logic like fact, and no fact is so forcible as that which concerns money and life.

Of course, it is not expected that our young institutions can, as yet, take stand with those now hoary in time, but it is a legitimate expectation that those who have the control of our public charities should, at least, make an effort in the right direction. It is too late in the nineteenth century for these gentlemen to shelter the derelictions of timidity behind a public ignorance and prejudice which is at least of their own creation. To educate its physicians, or rather to permit their education, is a compensation due to the community for the enormous expense which the support of our hospitals entails, and there is no reason why as much can not be done in Cincinnati as is done in New York.

How utterly irreconcilable with facts are the objections urged. You would carry a lot of students into the wards to pound on the chest and palpate the abdomen of the poor sick man, torture him by day and rack him by night, shock the delicacy of the female sex, and make of the sick bed a dissecting table. Thus, in cultivating science, you would destroy the first grand principles of humanity, which is the foundation of public charities.

Now square this view in the face. If it be true there should be heard complaints loud and bitter at the hospitals wherein bedside instructions is imparted. So far from this being the case patients are pleased with being considered cases of interest. They know that their disease is receiving the fullest possible attention, and they know moreover that every precaution is taken by the clinical director to prevent even the least annoyance. Inhumanity is unknown in the history of medicine.

Nothing strikes the student in more favorable contrast abroad than the respect everywhere shown to the medical profession. The names of Graefe, Frerichs, Trousseau and Nelaton, Billroth and Opolzer are absolutely venerated. The people know them as their benefactors and greet them with almost filial reverence.

The cases which return most promptly to our own dispensary are just those very cases which have been placed in the center of the room and lectured upon, while one student after another, in limited number, repeats for himself the examination directed. Not only do they thus return, but they bring others with them. A hospital or dispensary patient thus receives an amount of research upon his case, and is made the subject of the application of a skill which wealth can not command.

Add to this now, for the poor man's benefit, another grain of common sense. Each one of the four hundred students yearly assembled in our hospital, goes forth to practice somewhere, and somehow he must acquire the handicraft of his profession. As he is not allowed to obtain it in the hospital wards under a supervision which precludes the possibility of injury, he learns it from his patients miles often from a consultant. His first practice is always among the poor.

Does it not recoil, then, four hundred fold upon the poor for every case which he is prevented examining in the hospital wards?

It is only at the bedside that diagnosis, the test of the physician, can be learned. It is only there, by direct application himself, that the student may acquire the technics of his profession, in which the student should be drilled as the carpenter in the tools of his trade.

The physician of the future is characterized as he who is familiar with the delicate instruments of precision—the sphygmograph, the microscope, the ophthalmoscope, etc. Any one can recognize a storm when the heavens are black. He is the true prophet who foretells it from the cloud in the distant horizon perhaps no bigger than a man's hand. Any one knows consumption in the emaciated frame and hectic tinge or fever in the flushed face and high delirium. The skilled physician establishes, long before, with the microscope and thermometer, the diagnosis, the grade and the gravity. Think you he learns the use of these things from his mother's breast?

Next is advanced the great advantage of trans-Atlantic medicine in the provision made for young men, as so called private docents, who are permitted to deliver private courses to select numbers of students, thus bringing the student into direct contact with disease in all its forms. The policy of such a system is evidenced by an array of statistics from different institutions, exhibiting always the greatest number of students where the greatest opportunity for private study exists. It is, however, not only the patient and the student who are thus benefited. It is painfully true that we are almost barren in original investigation. It is a stinging rebuke echoed back to us from every land in Europe—You are only second-hand vendors of original discoveries. While this is not by any means true in the purely mechanical department of medicine, it is pitifully true in the branches of pure science that we shine but by reflected light. It is really sad in the extreme to see men of public position and independent means not ashamed to present papers of mere compilations of foreign literature, without a single original thought. Take, for instance, physiology—and this is selected because typically the science of medicine—England, France and Germany boast of a host whose names are mentioned, and the question asked, whose names in America dare be ranked with these? It is then claimed that this discrepancy arises not from want of talent, but from lack of opportunity; and arguments are advanced to prove that it arises from lack of appointments for young men who are willing to devote their whole time and energy to the study of individual subjects.

For the sake of humanity, for the sake of policy, for the sake of science, in the name of the patient, of the student and the physician, you are besought, guardians of our public charities, to adopt this more liberal management. Fling open the doors, too, to honorable competition, lest your institutions merit a place among those characterized by Stricker as supported for the "maintenance of antiquated trumpery and the fostering of nepotism."

The other deficiencies of American education detailed are, the lack of preliminary training and the laxity of examinations. Our limits do not permit even an abstract of the views presented.

The degrees were then conferred on the graduates by Hon. Flamen Ball. The Valedictory was delivered by Prof. Wm. H. Gobrecht, and the company dispersed, receiving the benediction of Rev. Mr. Elliott.

The following is a list of the graduates:

Armstrong, Alphonso, O.	Graham, Thos. A., Ind.	Moore, Eugene L., Ohio.
Baum, Henry C., O.	Grubbs, Louis Y., Ohio.	Patrick, Charles E., Ind.
Brandon, John R., Ohio.	Haight, John B., Ohio.	Rickey, A. C., Iowa.
Brewster, Andrew D., Pa.	Hall, John W., Ind.	Saylor, William, Ohio.
Brouilliette, P. L., Indiana.	Harman, George A., Ohio.	Shuff, John, Ohio.
Burton, Enos G., Ohio.	Hottendorf, Louis L., Ind.	Smith, Wm. C., Ind.
Burton, George W., Ohio.	Iutzi, Joseph, Ohio.	Songer, S. T., Ill.
Chapman, Calvin C., Ind.	Jones, Isaac D., Ohio.	Snarks, B. H., Ky.
Clark, Hurlbert H., Ill.	Jones, Montague J., Ill.	Vail, Jonathan B., Ohio.
Collins, Logan J., Ky.	Kellenberger, E. K., Ind.	Violet, John W., Ind.
Cook, Stephen M., Ohio.	Kitchen, Benj. F., Ohio.	Waggoner, D. R., Pa.
Cunningham, Dewees, Pa.	Loehr, Edward C., Ind.	Warner, W. H., Ind.
Dills, Malcolm, Ky.	Low, William H. H., Ohio.	Webb, Alvin C., Ohio.
Dunsmore, Geo. M. D., O.	McCash, Chas. A., Iowa.	Wheeler, John A., Ohio.
Field, Martin H., Ind.	McDonald, R. D., Ohio.	Williams, Morgan, Ind.
Garland, Zeus T., Ohio.	McIntyre, John W., Ohio.	Williamson, Albert M., Ind.
Gilliam, David T., Ohio.	Meredith, L. P., Ohio.	

DR. W. T. TALIAFERRO.

Meeting of the Board of Trustees of the Cincinnati College of Medicine and Surgery.

A called meeting of the Board of Trustees of the Cincinnati College of Medicine and Surgery was held March 24, to take action expressive of their feelings in regard to the death of Professor W. T. Taliaferro.

M. D., one of the members of their Faculty, when the following resolutions were presented and adopted.

Whereas, in the dispensation of that great law of Nature, the judgments of which are supreme, the Board of Trustees of the Cincinnati College of Medicine and Surgery are again admonished, by the sudden demise of Dr. W. T. Taliaferro, Professor of Ophthalmology, to pause and pay tribute to the memory of one so well deserved of the College and so highly respected by the Trustees, Faculty, and Students.

Whereas, we deeply feel his loss, and our College has been deprived of one of its veterans, distinguished not only as an Ophthalmologist, but as a teacher and practitioner—a man whose acquaintance and reputation was widely known—a man of great penetration and talent, whereby he stood almost unrivalled in his profession, and,

Whereas, He was viewed by all who knew him as a man of great genius; self-possessed, with an innate tact that made him bold and successful; and,

Whereas, Favored by his vast theater of practice, with a skill of diagnosis that really seemed beyond parallel, and as an operator endowed with possession of mind that was never shaken, and with a tranquil assurance that never was disturbed, and hence loved by patron and pupil as one whose great glory was in doing good, either in relieving the suffering of the body, or instructing those who yearly gathered together to prepare themselves for the noble profession; and

Whereas, He was a man whose life has been a harvest of registered facts, having served his country as a soldier in the war of 1812, and for over fifty years a practitioner, and a number of years a teacher of ophthalmology; whose labors have been great, whose life has been one of activity.

Whereas, The Board of Trustees mourning his loss, the Faculty missing a familiar face, the Students no more hearing his instructive voice; whereas, it is

Resolved, That it is with the most profound regret we deplore and mourn the demise of our highly esteemed friend and professor, W. T. Taliaferro, who has for so long been one of the shining stars in the galaxy of Ophthalmology, in the community in which he lived one of its brightest ornaments, and in his family the delight of life and joy.

MAX LILIENTHAL, D. D., LL. D.,
Pres't of Board of Trustees.

MILTON SAYLER, Secretary.

The following resolutions on the death of Dr. Taliaferro were adopted at a meeting of the students of the Cincinnati College of Medicine and Surgery, held Friday morning, March 24:

Whereas, Professor W. T. Taliaferro has been removed by the hand of death, we, the students of the Cincinnati College of Medicine and Surgery, adopt the following resolutions as an expression of our respect and personal regard for the deceased, and do tender our sympathy to his bereaved family:

Resolved, That by the death of Professor W. T. Taliaferro we are deprived of an able instructor, a wise counselor and faithful friend, who, by his earnest labors in our behalf, has won our lasting gratitude, and who, as an intelligent, high-toned gentleman, has gained our highest respect.

Resolved, That we extend our heartfelt sympathy to the family of Professor W. T. Taliaferro who above all realize their great loss.

Resolved, That a copy of these resolutions be sent to the family of the deceased, and also to the city papers and medical journals for publication.

G. W. DANIELS,
A. C. LEWIS,
J. W. PEARSON,
J. C. STOVALL,
Committee.

Editorial.

MODERN MEDICINE.—Prof. J. A. Murphy had the distinguished honor of delivering the Valedictory Address to the graduating class of the Miami Medical College at its Commencement, held February 28th. Now Professor Murphy holds the second position in the Faculty of the school—being regarded next in importance to Professor Mendenhall—and it is to be presumed his public expressions at least reflect those of his colleagues. Indeed, it is mooted that none of the Miamis ever make any utterance, or take any action, that has not first been passed upon by them all; consequently, what is said by one is the opinion of all. It is stated that Dr. Mendenhall's *great speech* before the American Medical Association was profoundly discussed at several faculty meetings before its delivery.

That our readers may be informed what views our Miami brethren hold of what constitutes "modern medicine," and therefore may be able to judge what they teach their students as sound medical doctrine, we propose to make some extracts from Professor M.'s address:

"Diseases are now divided into two great classes: preventable and non-preventable. The laws governing them have been studied with so much care in all parts of the world, that they may be relied on with almost mathematical certainty. Of this great fact the public are still ignorant. Patients will expect you to cure them of diseases that are incurable. The preventable diseases are self-limited; they run a certain course and terminate in convalescence—according as the constitution and habits of the patient have been good or bad. MODERN MEDICINE ONLY ATTEMPTS TO KEEP ALIVE UNTIL THE DISEASE HAS TERMINATED." (Small capitals ours). . . . "Sanitary science, or the laws of governing health and disease, has discovered that filthy streets, adulterated or diseased food,

impure air and water, small, crowded, and improperly ventilated houses, defective drainage, mental depression, and certain trades and occupations generate, or, at all events, greatly increase all the preventable diseases."

According to this Miami *sarax* there are only two classes of diseases—those which get well of themselves and those which are necessarily fatal. The first class are *preventable*, and the second class are *non-preventable*. The laws governing them have been so thoroughly studied all over the world, that the characteristic phenomena of each have become so well known that there can be no difficulty in recognizing them—indeed, "they can be relied upon with mathematical certainty." In brief, modern medicine is no medicine at all: there is a system or science of hygiene, but not of medicine.

We, with many others, would be very happy to be informed when, where, and under what circumstances this mathematical classification of diseases was discovered. We are the reader of a great many medical journals published in this country and in Europe, but have all along been profoundly ignorant that the castle of medicine had been torn down and that of hygiene erected in its stead; and yet, according to Professor Murphy, only the public are ignorant of the fact. We have been under the impression that it was our quinine that arrested a quotidian, tertian, or quartan, and that unless we administered it or some other drug, as arsenic, etc., which could scarcely be regarded as "supportive," that the disease would not be *self-limiting* in very many cases, but would finally result in some organic dis-

ease which would prove fatal. We have also given iron for the purpose of supplying an element which the system did not seem to have in sufficient abundance, and thought we had every reason to consider we were successful. Again, for an action which, as supportive, would be the last explanation we would think of giving, we have abstracted blood in pneumonia, pleuritis, peritonitis, etc.; prescribed mercury in syphilis; strychnia, prussic acid, arsenic, opium, belladonna, and a hundred other drugs in other diseases, and were pleased with the result—our patients getting well, and that, too, when their hygienic condition was very poor.

But to be plain: When a doctor talks as this professor does we set him down as saying what he knows nothing about—an ignoramus—a windbag belching forth nonsense. A few years ago this same individual was screeching that cod-liver oil cured consumption in opposition to Dr. McIlvaine's maintaining that it did not. He asserted that its action was medicinal, and not as a food, and cited a number of cases he had cured by it. His rhetoric and his medical knowledge are on a par. Take the following sentence from the paragraph from which we have quoted, and it is only one of several dubious ones in the same paragraph: "They [preventable diseases] run a certain course and terminate in convalescence—according as the constitution and habits of the patient have been good or bad." Can any one discover the relation which the words that follow after the dash have with those that precede it?

If "modern medicine" has demonstrated with almost mathematical certainty the main facts of disease, it has about attained to perfection, and there is no more to be learned, and further research may be abandoned. We apprehend that the real savans in medical lore would pronounce an individual making such an assertion as one devoid of intellect, and none the less so when coupling with it that the only proper treatment is "to support and keep alive until the

disease has terminated." If such doctrines be true, why "run" medical colleges when only a knowledge of hygiene is of any practical value? A knowledge of diagnosis would be of no utility, for the treatment would be the same, no difference what the disease might be.

But for fear our readers who have not read Professor Murphy's address may think that he is not properly represented by a single paragraph, we will quote again:

"The physicians of the last century believed that they could cure; and therefore had a remedy for every malady. Indeed, so far was his doctrine carried that medicines were imagined for every symptom. The wise and the foolish, the intelligent and the illiterate, still entertain these opinions, and now nothing is so offensive to many people in all classes of society as to be told that certain disorders or derangements require no medicine. How often do we hear, after investigating a case carefully, and having decided the cause, and find that the disease will disappear after its removal, we start to retire. 'Do you not intend to give me some medicine?' Modern medicine is busy in studying the causes of disease and thereby preventing them. * * * You must then first present modern medicine to the public mind, as it really is, that preventable diseases are not to be cured by drugs."

But, then, O learned Professor! the causes of disease are not the disease, no more than the house being without a lightning rod, which permitted the lightning to descend upon it, is the conflagration which is now consuming it; and in ninety-nine cases in a hundred they have ceased to exist before the physician is called in. The house *should* have been protected, but it *was not*; nevertheless, do you not think *some water might do some good*? Are you perfectly sure that science teaches that the fire itself ought not to be dealt with, unless it be to put additional timber (supportive treatment) into the flames? Again: a man has gotten a pneumonia by falling into a horse pond—will filling up the pond cure the pneumonia? Doing so may prevent other pneumonias, but we can not see how it will affect the present case.

If our readers will turn to page 482 of the REPERTORY for 1870—October number—they will find there a table exhibiting the mortality of the sick of the Cincinnati Hospital, gathered from the "Ninth

Annual Report, for the year ending Feb. 20, 1870, by J. A. Murphy, M. D., President of the Staff." In the hospital, where Prof. M. holds a prominent position, it is presumed the "modern medicine" treatment is carried out to some extent, although not altogether; and we may be able, therefore, approximately, by its showing, to judge of its success. Here is the table:

	Mortality.
Acute Rheumatism.....	5 pr ct.
Delirium Tremens.....	11 "
Apoplexy.....	83 "
Albuminuria.....	75 "
Acute Dysentery....	50 "
Puerperal Peritonitis....	100 "
Fracture o. Skull.....	60 "

No comment is necessary on these figures.

If science has demonstrated anything in late years it has proven that life is a "force" correlative of other forces, as heat is a correlative of motion, and *vice versa*. When a body has been set in motion it would always continue to move if an obstacle did not interfere; and the result of the interference in bringing the body to a state of rest is an evolution of heat to an amount that would be capable of imparting the same motive power to the body, if brought to bear upon it under proper conditions. So that no "force" at any time becomes destroyed, it only can be made to assume another form. Now, maintaining the "vital principle" in an organism is not to prevent it from being destroyed, but to prevent it from assuming any of its correlative forms. The vital force has a *tendency* to continue as vital force, as all the forces have a tendency to continue the same, and do so until prevented—and this *tendency* or property to continue as vital force is the *vis medicatrix naturæ*, which Prof. M. has heard of, but has no real conceptions about, not unlikely thinking it to be some animal or entity of some kind in the human body.

What is disease and what is death? Disease consists in some

obstacle or obstacles to the vital force continuing as such, and death is the final transition of the vital force into some other form. But can only the tendency or property of the vital force to continue as such—the *vis medicatrix naturæ*—remove the hindrances in its way? for this constitutes curing disease. Can only the impetus of the cannon ball overthrow the wall that is erected against it? It probably can do so, but would it not be better for some other power to do it, and thus save its motive power? for every obstacle weakens it more or less.

If the power that is in the vital force cures disease by overcoming the obstacles in its way, any other power, drugs, medicines, etc., as much cures disease which does the same thing. We think this proposition will be admitted by every one who has brains enough to hold more than one idea, and ability to compare them.

Prof. Murphy is notoriously a one idea man, and the idea which he holds at any time is not the result of any reflection on his part, but is picked up from those put forth by some sensational man as Bennet, or some one else of that ilk. His idea of the "supportive treatment," or "keeping alive until the disease terminates," was first put forth by that poor miserable drunkard, John Brown, who, suffering with gout and rheumatism, made use of it as an apology for his excessive drinking.

In Prof. Murphy's speech we have probably in fact the explanation of the laxity of the Miami Medical College graduating those who apply to them for diplomas. Disavowing that drugs cure disease, and therefore should be discarded—that disease is to be permitted to run its course, the patient merely to be placed under favorable circumstances, and if treated at all, only whisked—they place but little value on a knowledge of anatomy, physiology, pathology, materia medica, etc., and do not insist upon its possession. A gentleman who had attended a course of Lectures at the Cincin-

nati College of Medicine and Surgery, during the term of 1859 and '60, and then immediately abandoned the study of medicine and engaged in other business, at which he continued until last fall, applied near the close of the last winter's session to the same institution to be admitted to an examination for graduation. Meeting with a refusal, and advised to attend the spring course now in progress, he replied that he would "first try the Miamis;" he did so, and they graduated him at the close of their session the last of February. Here was an individual graduated by the faculty of the Miami Medical College, who had never attended a single course of lectures at their institution, and who had not been studying medicine until within a month or so, for over ten years, and as he had then only partially completed his studies, it is reasonable to presume he had forgotten what little he knew. We are ready at any time to give all the facts and circumstances necessary to substantiate this statement. What other is this, we would ask, than "running" a college for the purpose of selling diplomas?

In conclusion, we must beg the pardon of our readers for devoting so much of our space to an individual of so little importance as the so-called Prof. Murphy. In the profession of this city no value whatever is placed on his views on any thing pertaining to medicine, for he changes them so frequently. There is no doubt if the antiphlogistic theory of the treatment of disease was again revived in a sensational manner we would find him a mad advocate of it, and be apparently as unconscious of the inconsistency of his course, as he is now of his present inconsistencies both as regards his teachings and his acts, for his professional conduct will bear criticism no better than his expressions--an abusive enemy one day, the following a professed friend--one day speaking in the most disparaging terms of Dr. Dodge, and forbidding him in any case to salute him, and to-day extending courtesies to him. Dr.

D., we will mention, returns the courtesies, and patronizes the cliques.

"When the wicked are at variance let the righteous rejoice, but when they have met and kissed each other, let them beware," or words to that effect.

CORRESPONDENCE.

We have just received the following letter, which we have to place in our editorial department in order to make room for it:

PHILADELPHIA, March 10, 1871.
PROF. J. A. THACKER, M. D.:

A few days observation in Philadelphia has aroused deep regrets that I was so far deluded, by the absurdly exaggerated statements of the Cincinnati *Lancet and Observer* in regard to the clinical advantages of the Cincinnati Hospital, as to spend last winter in your city in attendance upon the lectures.

After seeing something of the opportunities at the hospitals and dispensaries and private courses of this city, and hearing the able and intelligent men who are engaged in teaching in them, I am fully convinced of the truth of what I had before suspected, that the clinical course at the Cincinnati Hospital is an awful sham.

Compare, for instance, the courtly manner and refined presence of Professor Gross, and his learning and abilities as a teacher, with the son of his father in your city, with his fussy consequentiality of littleness, and his absurd attempts at public lecturing.

Compare the finished style and thorough scholarship of Stille with that ranting, roaring son of Erin, and sum of incapacities, of your city.

Compare that accurate diagnostician and brilliant teacher, Da Costa, with your ponderous cloud of vagueness and obscurity, and compound of imposing ignorance and pretension.

Compare the excellent teaching and the dexterous manipulations of Ellerslie Wallace with the bungling incapacities of your old stupidity.

But why prolong these comparisons. Think, oh ye who have sat under the weary inanities of Dr. D—, the harmless babblings of Dr. W—, and the text book memorizings of Dr. T—, and wonder not that I feel in this different world like a man released from a horrid nightmare. Clinical instruction, forsooth! A patient, so-called, transferred to the lecture room, so covered with bed clothes that it is always a question whether it be an animated body or a dummy dressed for the occasion; a most miserable history either written on the black-board or read in the impossible English of a vapid interne; a didactic lecture, the night before gotten up from Watson, or Macintosh, or Cullen; something about the weather; the old joke of Dr. Diet and Dr. Quiet; simple sore throat converted into diphtheria, nineteen lectures on one case of favus, so called, and the same lecture each time. On such material does the learned editor of the *Lancet* and *Observer* base his extravagant encomiums of the clinical teaching of the Cincinnati Hospital.

If your hospital authorities really desire to elevate the institution to a respectable position as a place for medical teaching, they must clean out the Augean stables, filled as they are with the accumulated weaknesses of the Miami Clique,

T. G. R.

DEATH OF PROF. WM. T. TALIAFERRO.—Just as we are about closing up the present number of the *REPERTORY*, it has become our painful duty to chronicle the death of PROF. WM. T. TALIAFERRO, Professor of Ophthalmology in the Cincinnati College of Medicine and Surgery, and, for very many years, an eminent ophthalmologist. His fatal illness was very brief—just a week previous to the day of his death, which occurred March 22d, he was in attendance upon a faculty meeting of his college, and although complaining somewhat, to all appearance in good health. We hope in our next issue to publish a brief biographical sketch of the deceased.

A meeting of the Faculty of the Cincinnati College of Medicine and Surgery was held on the evening of the 22d, to take action on the death of Dr. Taliaferro, and the following was adopted:

WHEREAS, By a decree of Providence, to whose *fat* it behooves us all humbly to bow, Prof. Wm. T. Taliaferro, M. D., a member of the Faculty of the Cincinnati College of Medicine and Surgery, has been called from life and our midst; and

Whereas, We deeply feel the loss of our colleague, in that he was an upright man, an eminent physician and ophthalmologist, and ardently devoted to the interests of the college, it seems meet we should make expression of the deep sorrow we feel at his demise and separation from us, and our sympathy for the bereaved family. Prof. Taliaferro, at his decease, was full of years, being in the seventy-seventh year of his age. For many years he has been a leading practitioner in Cincinnati, devoting his attention more especially to ophthalmology, in which department of medicine he obtained a wide distinction. In the earlier years of his life he served in the army of his country—in the last war with Great Britain participating in the famous battle of Lake Erie, in which Commodore Perry obtained his memorable victory. For the last year he was probably the only surviving participant in that battle. Gone now from the active scenes of life, his memory will be cherished with devotion and respect by his large and widely-extended circle of friends, and especially by the Alumni of the Cincinnati College of Medicine and Surgery, who hold him in the highest regard.

Resolved, That the death of Prof. Wm. T. Taliaferro, an upright man, possessed of those qualities of mind and heart that strongly endeared him to all, an eminent physician and ophthalmologist, has produced in us deep sorrow; and although ripe in years, yet, if it had been the will of Providence, we would that he had been spared many years.

Resolved, That devoted to the interests of the Cincinnati College of

Medicine and Surgery as was Professor Talliaferro, and so highly esteemed as an instructor, the College has met with a loss that it will greatly feel. The alumni have been deprived of a friend who always took the highest interest in their welfare.

Resolved, That we tender our heartfelt sympathies to the bereaved family, and express the hope that they will find comfort in the high regard in which the character of the deceased was held by all who knew him.

Resolved, That we will attend the funeral of our departed friend and colleague, and follow his remains to their final resting-place.

Resolved, That the Secretary be instructed to transmit a copy of these resolutions to the bereaved family, to the city papers, and to a number of the medical journals, with the request that others should copy.

J. A. THACKER, M. D. }
A. J. MILES, M. D. } Com.
R. C. S. REED, M. D. }

DEATH OF DR. THOMAS CARROLL.

--Dr. Thomas Carroll, one of the oldest if not the oldest physician of Cincinnati, died March 13th. He was some 77 years of age, and had practiced medicine in this city for many years. Up to the time of his fatal illness he was engaged in the practice of his profession. He contributed very considerably to medical literature, and his articles always exhibited careful thought and an understanding of his subject. He was very positive in his views, and held in great disgust the Bennett mode of treating disease.

At a meeting of the profession convened for the purpose, the usual tribute of respect was paid to the memory of the deceased.

THE EXECUTIVE COMMITTEE of the Alumni Association of the Medical Department of the University of the City of New York purpose the publication, at the earliest possible date, of a complete catalogue of the graduates from that institution since its foundation. The records of the Faculty having been de-

stroyed in the burning of the college building some years ago, this project is one that should be seconded by every one of the alumni, of whom between two and three thousand are scattered throughout the United States. It is earnestly requested that each of these will without delay forward for enrollment his full name and post office address, with his professional history, including date of graduation, posts of honor and trust held, etc., and also any information which he may possess concerning former class mates who have since died or retired from practice. Communications should be addressed to the Secretary, Chas. Inslee Pardee, M. D., 72 West 35th street, New York.

MEETING OF THE STATE MEDICAL SOCIETIES.--As has been announced by us before, the Kentucky State Medical Society meets in Covington, and the Ohio State Medical Society meets in Cincinnati, on the 4th of the present month. The close proximity of the two places of meeting will permit an interchange of courtesies, which will be taken advantage of very much undoubtedly to the advantage and enjoyment of the members of both societies. Very considerable arrangements are being made, we understand, for festive enjoyments, and every one who attends the meeting of either society can depend upon having a good time.

AMERICAN MEDICAL ASSOCIATION--WM. B. ATKINSON, M. D., Permanent Secretary, Office 1400 Pine Street, S. W. cor. Broad, Philadelphia.

The Twenty-second Annual Session will be held in San Francisco, Cal., May 2, 1871, at 11 A. M. The following Committees are expected to report:

- On Cultivation of the Cinchona Tree--Dr. LEMUEL J. DEAL, Pennsylvania, Chairman.
- On Inebriate Asylums--Dr. C. H. NICHOLS, D. C., Chairman.
- On Institutions for Inebriates--Dr. JOSEPH PARRISH, Pennsylvania, Chairman.

- On the Structure of the White Blood Corpuscles—Dr. J. G. RICHARDSON, Pa., Chairman.
- On Vaccination—Dr. HENRY A. MARTIN, Mass., Chairman.
- On the Comparative Merits of Syme's and Pirogoff's Operations—Dr. GEO. A. OTIS, U. S. A., Chairman.
- On Lithotripsy—Dr. E. M. MOORE, New York, Chairman.
- On Veterinary Medicine—Dr. SAMUEL D. GROSS, Pa., Chairman.
- On Protest of Naval Surgeons, etc.—Dr. W. S. W. RUSCHENBERGER, U. S. N., Chairman.
- On National Medical School—Dr. FRANCIS GURNEY SMITH, Pa., Chairman.
- On American Medical Association Journal—Dr. JAMES P. WHITE, New York, Chairman.
- On Criminal Abortion—Dr. D. A. O'DONNELL, Maryland, Chairman.
- On Nomenclature of Diseases—Dr. FRANCIS GURNEY SMITH, Pa., Chairman.
- On National System of Quarantine—Dr. J. C. TUCKER, California, Chairman.
- On what, if any, Legislative means are expedient and advisable to prevent the spread of Contagious Diseases—Dr. M. H. HENRY, New York, Chairman.
- On Renewal of Prescriptions by Apothecaries without Authority—Dr. R. J. O'SULLIVAN, New York, Chairman.
- On American Medical Necrology—Dr. C. C. COX, D. C., Chairman.
- On Medical Education—Dr. ELY GEDDINGS, South Carolina, Chairman.
- On Medical Literature—Dr. P. G. ROBINSON, Missouri, Chairman.
- On Prize Essays—Dr. T. M. LOGAN, California, Chairman.
- On the Climatology and Epidemics of—
 Maine—Dr. J. C. WESTON.
 New Hampshire—Dr. P. A. STACKPOLE.
 Massachusetts—Dr. H. I. BOWDITCH.
 Rhode Island—Dr. C. W. PARSONS.
 Connecticut—Dr. J. C. JACKSON.
 New York—Dr. W. F. THOMAS.
 New Jersey—Dr. C. F. J. LEHLBACH.
 Pennsylvania—Dr. D. F. CONDIE.
 Maryland—Dr. C. H. OHR.
 Georgia—Dr. JURIAH HARRISS.
 Missouri—Dr. F. E. BAUMGARTEN.
 Alabama—Dr. R. F. MICHEL.
 Texas—Dr. S. M. WELSH.
 Illinois—Dr. R. C. HAMIL.
 Indiana—Dr. J. F. HIBBERD.
 District of Columbia—Dr. T. ANTISELL.
 Iowa—Dr. J. C. HUGHES.
 Michigan—Dr. G. P. ANDREWS.
 Ohio—Dr. T. L. NEAL.
 California—Dr. F. W. HATCH.
 Tennessee—Dr. B. W. AVANT.
 West Va.—Dr. E. A. HILDRETH.
 Minnesota—Dr. CHARLES N. HEWITT.
 Virginia—Dr. W. O. OWEN.
 Delaware—Dr. L. B. BUSBY.
 Arkansas—Dr. G. W. LAWRENCE.
 Mississippi—Dr. J. P. MOORE.
 Louisiana—Dr. S. M. BENISS.
 Wisconsin—Dr. J. K. BARTLETT.
 Kentucky—Dr. L. P. YANDELL, Sr.
 Oregon—Dr. E. R. FISK.
 North Carolina—Dr. W. H. MCKEE.
- Secretaries of all medical organizations are requested to forward lists of their Delegates as soon as elected to the Permanent Secretary.
- Any respectable physician who may desire to attend, but can not do so as a delegate, may be made a *member by invitation*, upon the recommendation of the Committee of Arrangements.
- W. B. ATKINSON.
- OFFICERS OF THE ACADEMY OF MEDICINE.—The following gentlemen have been elected officers of the Academy of Medicine for the ensuing year:
- President, C. G. CONEGYS, M. D.
 1st Vice, W. P. THORNTON, M. D.
 2nd " A. M. BROWN, M. D.
 Rec. Sect., J. W. HADLOCK, M. D.
 Cor. " E. B. STEVENS, M. D.
 Treasurer, W. T. BROWN, M. D.
 Librarian, JOHN LUDLOW, M. D.

THE CINCINNATI MEDICAL REPERTORY.

VOL. IV.

CINCINNATI, MAY, 1871.

No. 5

REPORT ON THE ANTAGONISTIC POWER OF OPIUM AND BELLADONNA.

Read before the Ohio State Medical Society. By JNO. A. LITTLE, M. D.,
Delaware, Ohio.

Owing to the limited extent of my personal observation upon this interesting and important subject, it is with much hesitation that I attempt to make a report thereon. Believing, however, that even one marked case in one's personal experience, when fully sustained by the statistics of many other cases of equal authenticity, ought to have weight in influencing the opinion of the profession, I submit the following report.

I do not propose to advance any new ideas, or to advocate any new theory upon this subject. The evidence before the profession is sufficient, I think, to warrant the assertion that there is a well marked antagonism between these two remedial agents. My effort shall be, by the statement of a few interesting cases, to so impress the mind of the profession with the value and importance of the fact that, in cases of emergency, they will have confidence to act promptly and efficiently, and with a feeling of assurance of success, even in cases which, under other circumstances, would be utterly hopeless. There are but few occasions more trying and embarrassing to the physician than those of poisoning, whether it be the result of accident or of suicidal attempt. The knowledge of, and the possession of, a reliable antidote, lifts a mountain of responsibility from his shoulders.

It is entirely unnecessary on this occasion to give the botanical history and therapeutic action of these medicines, for with

these we are all supposed to be quite familiar. As to the *modus operandi* of medicines, I believe we are still considerably in the dark. There is much speculation upon this subject, also a great deal of theory and guess-work. Some things we do know from experiment which we accept as facts.

For instance: it has been pretty well demonstrated that opium is a narcotic and produces sleep, whilst belladonna is a deliriant and is not apt to cause sleep. Moreover, that opium produces relaxation of the capillary bloodvessels, whilst belladonna causes contraction of the same. Opium seems to exercise its greatest influence upon the nerves of organic life, thereby producing a slow pulse and slow respiration; also contraction of the iris. On the contrary, belladonna acts directly upon the nerves of animal life, increasing the frequency of the heart's action, and the respiration, and causing dilatation of the iris.

It is easy to see how chemical poisons may be antidoted by chemical processes, one by combination with another producing a third, which is either inert or innocent. It is not so easy to understand how one vegetable medicine, whose action is probably entirely upon the nervous system, should be antidotal to another whose action is essentially in the same direction. This, however, appears to be the case in these two medicines. Hoping that the report of a few characteristic cases will satisfy the profession as to the fact of the antagonism of these two medicines, I will proceed to relate them as concisely as possible.

The first will be cases of opium poisoning.

At half past nine o'clock P. M., on April 11th, 1870, my friend Dr. J. H. White called hurriedly at my office for a stomach pump. On inquiry I found that two hours before, two-thirds of a teaspoonful of laudanum had been given to an infant not quite four months of age, in mistake for Winslow's syrup. It was an hour after it was given before the error was discovered. Dr. White found the babe quite narcotized, but still able to swallow. He had for an hour endeavored with ipecac, tartrate of antimony and sulph. zinc to produce emesis without success. He had given remedies to as full an extent as he thought safe. I told him that the time for evacuants of that kind had passed, and that as the poison was already absorbed, and was then going the grand round of the circulation, the stomach pump would be of no avail. He must antidote the poison. He asked what would

answer that purpose. I assured him the belladonna would do so. We immediately visited the patient. It was comatose, though not to such an extent but that it could swallow the antidote. Had it been so I should have resorted to hypodermomy. The surface was cold and pallid, and the respiration slow; the pulse too feeble to be counted; the pupils were contracted to a small point. We gave at once fifteen drops tinct. belladonna. After the expiration of fifteen minutes, being unable to see any effect from the antidote, the dose was repeated. In another fifteen minutes there was a slight dilatation of the pupil observable, and the temperature of the surface was better, as was the respiration also. Still we gave a third dose of fifteen drops. We then waited half an hour, when dilatation was so decided, and consciousness was so much improved, that I felt confident the babe was safe. Still to make sure I gave fifteen drops more, and told the parents they could take the babe to bed with perfect assurance of its safety. I called the next morning and found the patient perfectly well, with the single exception, that the pupils were dilated to the full extent. I have no doubt that its vision was much disturbed, though it was not old enough to tell us so. No other medicine was given. If there is no antagonistic or antidotal property in these medicines, it would be very interesting to know what became of that large dose of laudanum. It is certain that not a drop of it was evacuated. Also it would be interesting to know how an infant of less than four months could take in the course of one hour sixty drops of a good tincture of belladonna with perfect impunity.

Dr. G. R. Patton, in the *Lancet and Observer* for June, 1869, reports the case of a lady to whom, at three o'clock, P. M. of April 10th, he gave two grains of morphia hypodermically, for severe neuralgia. He says, that in less than five minutes all pain had subsided, and there were decided symptoms of narcotism. In ten minutes her case was altogether alarming. Pulse, 30; respiration, 10; profound coma, pupils contracted. Between artificial respiration, electricity, and atropia, he chose the last. Deglutition being impossible, he at once gave one-sixteenth grain of atropia, hypodermically. After waiting a few minutes, and observing no effect, he injected another one-sixteenth grain. In five or six minutes he found that the pulse could be counted, the respiration more frequent, the pupils dilated a little, surface

becoming warmer, but insensibility still complete. He then injected another one-sixteenth grain of atropia. In fifteen minutes afterwards the pupils had dilated to a mere rim, and there was a partial return of consciousness. By ten o'clock she was comfortable, but feeble, and by ten o'clock the next morning she was well.

He very properly remarks that, "the antagonistic action of opium and belladonna is now so clearly recognized that we may, with great confidence, have recourse to either one as remedial of the effects of the other, in any case in which a poisonous dose has entered the circulation."

Dr. C. C. Lee reports, in the *American Jour. Med. Sciences*, the case of a child, aged two years, to which laudanum had been given in an unknown quantity, probably for the purpose of infanticide. He says, "enough, however, had been swallowed to render a fatal prognosis almost positive." The tincture of belladonna was instantly given in doses of fifteen minims, repeated at intervals of twenty minutes, until four doses were taken. "Soon after the fourth dose the child exhibited every sign of the first stage of belladonna intoxication." The medicine was discontinued, and soon the child was to all appearance well. "No vomiting or other disagreeable sequela occurred."

Prof. Wilson, of the Women's Med. College at Philadelphia, relates a case of poisoning by repeated injections of sulph. morph. of $\frac{1}{4}$ grain. He says, "within a short time after receiving the last dose, which must have been somewhat larger than the preceding one, she became comatose, with a suffused and purple countenance, stertorous respiration, contracted pupil, and complete insensibility." One quarter grain of atropia was administered, hypodermically. "The pupils were quickly (almost instantly) fully dilated, with complete insensibility to light, the stertorous breathing ceased, and was replaced by quick, hurried, almost gasping respiration."

Symptoms of belladonna poisoning were well marked, I have no doubt that the antidote had been administered more freely than was necessary. Nevertheless, the patient made a rapid and perfect recovery.

Dr. M. S. Buttles relates, in the *Med. Record*, of Aug. 15, 1868, a case occurring in his own practice which shows the efficacy of belladonna in cases of poisoning by opium. He had given it

the course of twelve hours, two hypodermic injections of sulph. morphia, of $\frac{1}{2}$ grain each time. Within thirty minutes after the last injection the patient was narcotized. The respirations were but seven to the minute, no pulse at the wrist, pupils contracted, and extremities cold. Atropia was administered hypodermically, two doses of one-sixtieth grain each, with an interval of half an hour. In less than one hour consciousness was restored and the patient out of danger.

Dr. B. F. Reynolds, of Hulton, Pa. reports, in the *Med. and Surg. Reporter*, for Aug. 1868, an interesting case in which a mother had given, by mistake, from half to three-fourths of a teaspoonful of laudanum to an infant but five weeks old. He gave fifteen drops of tincture belladonna at intervals of a few minutes. The babe was saved.

Dr. Norris, of Phil. reports, in the *American Jour. of Med. Sciences*, a case, in which, as near as could be estimated, the patient had taken seventy-five grains of sulph. morph. In the course of five or six hours, fifty grains of ext. belladonna were given, in connection with other remedies. The next day the patient was well. Dr. Norris, also, in the same paper, gives, in tabular form, the history of ten cases of opium poisoning treated by belladonna. He states the amount of opium taken, the condition and age of the patient, the amount of belladonna given, and the result. There was only one fatal case. This is sufficient for opium poisoning.

I will now invite your attention to a few cases of belladonna poisoning treated by opium.

This is of much rarer occurrence, partly because it is not so much used medicinally, and never to my knowledge for suicidal purposes. It is generally the result of accident. Children are often tempted by the inviting appearance and flavor of the berries to eat them. Sometimes collyria made from atropia, or the extract of belladonna, are taken in mistake for other medicines.

Dr. Horing, in 1868, relates the case of a child three and a half years old, that swallowed a solution of one grain of atropia in three drachms of water. Vomiting occurred, and very promptly symptoms of poisoning. A subcutaneous injection of $\frac{1}{4}$ th grain of morphia was promptly practiced. Very soon a decided improvement in the condition of the child took place. The pulse fell at once from 160 to 120; the respirations from 32 to 28. By

the end of forty-five minutes consciousness and speech had returned. In a few hours the child was fully restored, with the exception of some dilatation of the pupils, which continued a few days longer.

Dr. Lee, in the *American Journal Medical Sciences*, relates the case of "a child, aged six years, to which had been given, in mistake for syrup of rhubarb, a drachm of succus belladonna, an unofficinal preparation, very concentrated, and only used in collyria. The characteristic symptoms of belladonna poisoning were almost immediately apparent; the child's face became scarlet, and it tottered insensible to the floor." Dr. Lee says he "was instantly sent for, and found the flush on the face deepening to a violet hue, the eyes fixed and staring, the pupils dilated to the utmost, tongue dry, pulse slow and bounding, and the child almost comatose. Twenty drops of laudanum by the mouth, and the same by the rectum were simultaneously given, and at intervals of half an hour the dose of twenty drops was repeated, until the little patient had taken one hundred and twenty drops in all. After the third dose the pupils began strongly to contract, the purple hue of the face to fade, and in three hours the child was well and running about the room.

Dr. Norris, in his table of cases before referred to, gives the data of fourteen cases of belladonna poisoning treated by opium, all but one of which were cured. In this case the pupils remained dilated; in all cases which recovered the pupils contracted before sleep. He also gives a record of four cases of poisoning by atropia treated by opium, all of which were cured. Many other cases are on record, but these I believe to be sufficient to demonstrate conclusively the mutual antagonistic properties of these medicines. If this is true, it is a matter of importance that it should be fully appreciated by the profession. The idea of this antagonism is not of recent date. I find that many years ago it was acted upon to a certain extent.

There seems to be among the profession some degree of timidity in regard to the use of belladonna. It is apt to be looked upon not only as a very potent, but also as a very dangerous remedy. Compared with opium I believe it quite safe. The poisonous effects of opium come on so insidiously, and their approach is so gradual, that they are often not detected until there is complete narcotism. It is not so with belladonna. The

largely dilated pupil, and the erythematous rash, give warning in time. One reason why those who unsuccessfully have attempted to antidote opium by belladonna, or vice versa, is, that their dose of the antidote has been far from commensurate with the amount of poison taken. It is of importance to approximate as nearly as possible to the amount taken, and regulate the antidote accordingly. It must be constantly borne in mind that poisonous doses of one must be met by equally poisonous doses of the other in order to be successful. It is clearly proven that one which in ordinary circumstances would be poisonous, is not only innocent, but salutary, when there has been a poisonous dose of the other taken. If these characteristic cases which I have related will contribute to satisfy the profession of the value and importance of the subject, and tend to inspire confidence in this mode of treating poisoning by these drugs, the object of this report will be fully accomplished.

DEPOSITS FOUND IN THE HEART AFTER DEATH.

By CHAS. A. LYND, M. D., Cincinnati, O.

The patient, a lady, who at the time of her death was seventy-three years old, about five feet five inches in height, and about one hundred and ten pounds in weight, had, until within a few days of her demise, enjoyed excellent health for fully two years, in all that time not needing the least medical assistance, and gaining in weight continually.

Two of her daughters had previously died of heart disease, but she had never complained of any such trouble until two days before she breathed her last.

On the 8th of March she was attacked with a cold, which increased so, that on the evening of the next day she called in medical assistance. At this time the symptoms were those only of a severe cold, there being no special appearance of heart disturbance. The following day (the 10th) there were asthmatic symptoms, which continued and increased until they became alarming on the 11th inst. Danger was now apprehended, and her friends warned. Early the next morning, before assistance could be called in, she expired, quickly and quietly.

Her children desiring a *post mortem* examination it was made

in the presence of two other physicians, with the following results, the examination being made twenty-eight hours after death.

EXAMINATION.

In making the incision along the sternum, from the clavicle to its lower extremity, a deposit of fat was found, varying in thickness from three-quarters of an inch to an inch and one quarter. This condition was in itself very remarkable in one of her age, size and weight.

The lungs were found inflated, but quite natural in appearance.

In cutting through the pericardium about two ounces of fluid were found around the heart; and the heart itself was covered with a thick coating of fat.

Wanting to remove the organ for more thorough examination, we proceeded to sever its connections, beginning with the aorta, but had not entirely cut through this vessel when something was discovered lying within it. Catching this substance with the forceps, I drew forth, with but slight resistance, a beautiful, clear, and, in appearance, fatty mass, about eight or nine inches in length. The portion which evidently came from the left ventricle was much larger than the rest, and bulb shaped, while the other portion was long and slim, and divided into several branches, which extended through the aorta, how far, we could not tell, as its connection was broken, and we were not permitted to extend our examination.

Each of the other three cavities of the heart contained a similar clear, fatty-looking mass, those in the auricles being larger than those in the ventricles.

These masses are not adherent, but little loops were thrown around several of the muscoli pectinati.

To each of these masses were similar long, slim branches, just as in the aorta, each of the openings to and from the heart having one of these branches extending through it. How far they went into these vessels it is impossible to tell, as we could not follow up the dissection; but my impression is that they extended the full length of the larger vessels, if not into the smaller ones too.

This substance found within the heart was of a clear, transparent globular, fatty appearance, very delicate, and easily torn by the tenaculum, so much so that we could get no hold upon it with that instrument, it tearing immediately out.

Although the heart and vessels were full of blood, these masses were not in the least stained by it, they being just as clear at the moment of opening the heart as after being washed, showing conclusively that they were not clots.

After they had been in alcohol a short time they lost their clear, transparent appearance, and became opaque, tough and stringy.

Wilson, in his *Anatomy*, speaks of "some fine specimens of white fibrin being frequently found with the coagula; occasionally they are yellow and gelatinous. The older anatomists called these substances 'polypus of the heart;' they are usually met with in the right ventricle, and sometimes in the left cavities."

Is this a description of a substance similar to the one before us? If so, our case exceeds Wilson's description in having the masses not only in the cavities he mentions, but in *all* the cavities, and *extending into the large vessels*. If it is not the same as he describes, *What is it?*

WHY SHOULD NOT A WOMAN STUDY MEDICINE?

By W. A. R.

The question of the propriety of the study of medicine by woman is one which has had quite a notoriety in these days of reform, and yet it is one which with a proper view at both sides may easily be decided.

Medicine is a profession which in all ages of the world has been eminently useful. There is no other employment, which has rendered more practical good to mankind, than that which binds up his bleeding wounds, which cools his aching brow, and when he is on the brink of the grave rescues him to life, love and usefulness.

The medical profession is a labor of love. Talk as you will of physicians laboring for money, but when we see men toiling the livelong day through spring, summer and winter, through sunshine and rain, melting heat and freezing cold; when we see them at the midnight hour, tired with the labors of the day, when all others are enjoying "Nature's sweet restorer—balmy sleep," when we see them at any hour of the night hastening to the bed-side of the sick and dying, never swerving for heat or

cold, health or sickness, risking their lives in the chamber of pestilence and disease, when we witness this risk and self-denial for the sake of others, we honor the profession, and firmly believe that it contains the true essence of practical Christianity—Charity.

Now why should not woman be allowed to labor side by side with her lord (?) in this work of love? Has not always the place of woman been at the bedside of the weak and dying? Ever since her creation she has been the "ministering angel" to the suffering. We see her in the hamlet and in the palace, on the field of battle, where the wounded are shrieking, their limbs torn asunder, their bodies bruised and bleeding—every where and at all times where there is suffering—we find woman with her noiseless footstep, gentle hand, sympathizing heart and sweet smile, administering comfort and sympathy. Yet how much more good she might have done had she had a minute knowledge of anatomy, physiology—all that pertains to the cure of disease and the administration of medicine.

Woman is largely gifted with the qualities which pertain to a successful physician. She has sympathy! Sympathy is the tie which binds mankind together, and if there is any thing which is necessary to the profession of medicine it is sympathy. It enlists the heart of the physician, it guarantees a full exertion of his power for the benefit of the patient, and a care in the administration of medicine not otherwise found. Sympathy is largely developed in woman. Her station is ever that of the comforter. Her tender heart is touched by every trial, care, or misfortune that falls on a fellow creature. We often notice with what care a mother at the bed-side of her child administers the medicine. With a tearful eye, and a heart overflowing with love and sympathy, we see her watch the long night through, anxiously noting every symptom, leaving nothing undone which would benefit the sick one, and yet, place that mother at the bed-side of an utter stranger, and you find the same sympathy, the same care, the same love for her fellow-being. This cannot be denied. We point to the battlefield and to the hospital for proof of our assertion.

Woman is attentive, careful, patient and cheerful. She has the art of noticing the many little inconveniences and troubles which afflict the sick one. No one can regulate the light, turn

the heated pillow, administer the cooling draught, encourage the drooping heart, as woman. She is ever on the watch to give little comforts of which another would not think.

She is careful. How anxiously she awaits every change in the condition of the patient, how careful she is about the temperature and ventilation of the sick room, and the administration of medicine. How cautious she is about any little risk which may produce a relapse in the patient. She is patient, and this is no trifling requirement. When the sick one is whimsical, when it seems that nothing will satisfy, when another would be provoked by continued rebuffs, we see in woman an unexampled patience. Her face is never furred by a frown, and she will watch and wait, through day and night, with that same love and application; for her sympathy prompts her to look not at the conduct, but at the sufferings of the patient.

Then she has that inestimable quality—cheerfulness!

“Mirth is the medicine of life;
It cures its ills, it calms its strife;
It softly smoothes the brow of care,
And plants a thousand graces there.”

Truly the wise man hath said, “A merry heart doeth good like a medicine, but a broken spirit drieth the bones.” No one can give better evidence of the truth of this than a physician. He knows how difficult it is to make headway against despondency. He knows too well how often men lose their lives by this evil, when cheerfulness would have saved them. Oh! if the physician could but—

“Minister to a mind diseased,
Pluck from the memory a rooted sorrow,
Raze out the written troubles of the brain,
And with some sweet oblivious antidote
Cleanse the stuffed bosom of that perilous stuff
Which weighs upon the heart.”

If he could always impart cheerfulness, how would the ills of “poor humanity” diminish. Now, woman is a cheerful being. Her bright smile and consoling words bring comfort and good cheer. There is no despondency. She is ever patient and cheerful, hoping to the last.

It has been urged against woman in this question that the practice of certain branches of the medical profession would be

inconsistent with her delicacy. We assert that there are cases in which the delicacy of woman is shocked by the attendance of a male physician. If there is impropriety on the one hand, there is on the other. If it be indelicate for women to treat certain diseases of males, it is equally indelicate for men to treat certain diseases of females. We have this assurance that, in diseases of women and children, a female is more highly fitted to practice than a male. Some have said that woman is timid, and would shrink from the experiences of a medical life. It would be as reasonable to urge that because some men are timid, delicate creatures, none among them are fit for physicians, as to say that because some women are nervous and weak, there are none that have the necessary capability and fortitude.

Now, when we see the many inestimable qualities in woman, when we witness her patience, cheerfulness, care and attention, when we see her zeal for study and her aptness to comprehend, we say by all means let her study medicine—the science of humanity. God has not confined knowledge to the minds of men, he has not stipulated who should do good and who should not. He has given to all, male and female, an innate desire for knowledge. Then let us throw wide open to woman the avenues of science and knowledge, and let us place no impediment in the way of that usefulness for which she is naturally so eminently calculated.

THE SUBCUTANEOUS ASPIRATOR.

An address delivered before the Vienna Society of Physicians, Dec. 16, 1870, by Dr. JOS. GRUENFELD, First Assistant Physician in the Department of Prof. SIGMUND.

Translated from the Vienna Med. Press, Feb. 26, 1871, By JAMES T. WHITTAKER, M. D.

In numbers 4 and 5 of the *Vienna Medical Press*, 1869, I published a method of treating buboes by subcutaneous suction of their contents. The instrument represented consists of an ordinary syringe, connected by rubber attachment to a simple exploratory trocar.

The method was described as follows: "having inserted the trocar into the canula the point is pushed into the cavity of the

suppurating gland, the trocar withdrawn, and the syringe with depressed piston attached to the canula; seizing the canula now with the thumb and finger of the left hand to steady it in position, the piston is slowly withdrawn with the right, while the cylinder fills with pus. Having detached the cylinder it is easily emptied of its contents and re-applied until the last drop of pus is extracted."

This method of treatment has proven of great value in a great number of cases.* It possesses many advantages over any other, and may be appropriately styled conservative in nature in that it does the least injury to the skin, excites the least pain and leaves the least cicatricial deformity. Even in those cases in which it has failed, those in which from some cause or other final resort to the knife was necessary, nothing has been lost by the exploratory puncture. I may, therefore, use the motto adopted by Tomowitz in his essay on my method, "should it succeed much is gained, should it fail nothing lost."

When, however, it became necessary to re-apply the cylinder a number of times—and this is usually the case—it was found that there was danger of the admission of air. This is, however, really of little consequence, as the air is easily pumped out again, or may be even expressed by the side of the canula by pressure upon the gland.

A second inconvenience is the liability to injure the edges of the wound in the tractions of re-adjustment. This too, however, may be avoided by a little care.

To avoid these inconveniences and the loss of time attending its frequent removal, as well as to permit the introduction of medicated injections without disturbing the instrument, the following improvements have been added.

[Here follows a description of the well known double canula arrangement with valves, as subsequently introduced in more complicated form by Deulafoy, of Paris. See a translation in the *Cincinnati Lancet and Observer*, Jan. 1870.—TRANS.]

If the aspirator was of diagnostic value before, this is increased with this modification, as it is more precise and more safe. The color, consistence and other properties of the fluid may be ascertained by simply exhausting some of the contents into the cylin-

* See Tomowitz, Vienna Med. Press, No. 40, 1869. Hermann, Session of the Hungarian Soc. of Physicians, April 8, 1869. Stoehr, Session of the Wursburg Soc. Phys., 1869, etc.

der without withdrawing any. Moreover, a minimum amount of fluid may be extracted for examination. In a therapeutic point of view I have had the opportunity of demonstrating the value of the instrument in many ways, nearly 200 cases of bubo alone have thus been treated.

The results of the modification have been confirmatory of the success which attended the use of the simpler instrument first devised.

The syphilitic department of Prof. Sigmund, 210 patients, exhibits at present only 15, i. e. 7 per cent with traumatic surfaces. These are cases in which, on the one hand, aspiration was first attempted, and afterwards resort was had to the knife, or on the other, in the interest of the clinic, the knife was used at the outset or other methods of treatment, blisters, caustics etc., were employed. Finally, in other cases the disease on entry was so far advanced that the integument was necrosed or fistulae were established.

It is, however, not meant that this treatment is appropriate for all buboes. There are many cases which promise no success to this method from the first, and it is difficult to say precisely which are the cases in which it is indicated. To this, however, we can testify from experience; the duration of treatment is markedly abbreviated, while the contents of suppurating glands may be fully evacuated with the smallest possible wound. A great variety of abscesses, different in form, seat, size and origin have been subjected to this treatment with the best results. Examples are abscess of the glands of Bartholine, scrofulous abscesses of the neck, metastatic abscesses (after typhus,) sub-peritoneal abscesses (puerperal,) cold abscesses etc.

Some cases of exudation in articular cavities were treated with repeated puncture with prompt success. A case of scorbutus presented with an extensive intramuscular extravasation in the depth of the calf of the left leg. Pain was exceedingly severe. The extravasation was at such depth as to be scarcely manifest by fluctuation. The exploratory puncture was made, and more than three ounces of hemorrhagic exudation emptied. Complete involution followed upon the second operation.

A case of left sided pleuritic effusion of immense quantity caused marked dyspnoea, reduction of pulse, etc. Paracentesis pectoris in the seventh intercostal space, axillary line, emptied

six pounds of fluid, whereupon the respiratory difficulty ceased at once, the patient recovered completely and left the hospital in a few weeks.

Finally, I mention five cases of hydrocele in which the instrument was used, in three a solution of iodine was injected without removal, all with perfect success.

The address contains finally suggestions of the simple modifications necessary to adapt the same principle to urethral and uterine syringes, stomach pumps, vaginal douche, etc., and closes with the advantages this instrument possesses over that since introduced by Deulafoy.

MEMOIRE UPON GANGRENE OF THE PENIS.

By M. DEMARQUAY. Translated from the "Archives Generales"
by T. C. MINOR, M. D., Cincinnati, O.

It is a matter truly worthy of remark that, up to the present time, gangrene of the penis has not been the subject of any special study. This want of information as regards such a topic to me has been the much more surprising, since, after many researches, I have acquired the conviction that this morbid termination is far from being rare. It is mentioned in the works of the oldest authors, and even going back as far as Hippocrates, our eternal starting point, we find a very distinct mention of its existence. The disease is, in effect, from all time; it arises from abuse, and every one knows that this follows very nearly the ability to use.

Gangrene of the penis is different from gangrene in general, at least in its results. It is a true local death; it is the extinction of all organic action in the constituent parts of the penis which are attacked by it, with reaction of the vital strength in the neighboring tissues. This mortification, this rottenness, as A. Pare calls it, is then always the *yayypaira*, *gangraena* of the ancients. It has as well its train of special symptoms, as we shall see, but they remain one in the effects that they produce.

I have said that gangrene of the penis was well known to the ancients. I will say at the same time that, outside of the medical camp, it has been described by the historians of that time. I have for a proof this remarkable passage from Thucydides,

in his *De Bello Peloponnes.* "The disease," says he, "after having commenced above, and attacking the head, runs through the whole body; and if one escapes the worst of the dangers, his extremities always carry the traces of the affection; for the disease attacks the sexual organs, the hands, the toes, and many of those whom it leaves carry the scarred parts to their graves." Now, we know that certain authors—Malfalti, for instance—have decided the plague of Athens, of which Thucydides spoke, the manifestation of *scarlatina*; and that others, as Scuderi and Kraus, have recognized it as varioloid.

If we add to these proofs the frequent existence, in the time of Hippocrates, of ulcers of the genital organs; and if, moreover, we observe that, under the influence of the typhus constitution, prevailing at that time, those diseased being attacked with an erysipelatous inflammation, which changed itself quickly into a humid gangrene, and rapidly destroyed the affected parts, there will no longer be a doubt in our minds of the reality of gangrene of the genital organs at that epoch. Galen has, moreover, substantiated these same facts.

FREQUENCY.—If we judge of the frequency of gangrene of the penis by the silence of authors, we should be led to believe that it is a rare affection: such is not my belief. In my researches, incomplete beyond doubt—for who can fathom all!—I have been able to collect twenty-five observations, published in the periodical compilations. The lectures I have given, the observations that these have given rise to in my mind, have given me, moreover, the certainty that this gangrene is a frequent complication of different lesions of the penis; and it can not be otherwise, if one goes over the long list of causes that may determine it.

It is necessary for the remainder to remark that this complication happens among individuals generally enfeebled by excesses, debilitated by age or abuse, and among whom is manifested an excitation of the genital organs from different causes. Hunter has not failed to put weight on this fact, and his theory of gangrene by inflammation, by diminution of vital energy, united to a too intense action of the part affected, has received in practice numerous applications.

SEAT.—Nothing is more varied than the seat of gangrene of the penis. Without doubt the extent can not vary much, since the organ itself has a clearly determined limit. But, in it, all

the points may be the seat of mortification. Sometimes the prepuce alone is attacked, and this is most frequently the case. The skin of the penis may be affected *in toto*, as far as the base of the organ. Astruc describes as the place of selection the cutaneous parts, pendant and loose, as the prepuce; "from it," adds he, "it reaches in a little while all the skin of the penis, and at the same time the cavernous body."

Disorganization may, moreover, invade the neighboring regions, as far as to the groins and umbilicus; the glans, the urethra, the cavernous portion, may undergo sphacelus, either in part or in whole; this is very rarely the case, however. Forestus cites an example of total gangrene of the penis, which he found detached in a cataplasm which had been applied to the parts. We may finally observe the destruction of the spongy tissue of the urethra and a portion of the cavernous body, without the skin itself presenting any other manifestation than an opening, a fistula by means of which the mortified parts may be expelled. This thing, it is true, can not be the expression of the ordinary law; for, generally, the sub-cutaneous cellular tissue is invaded, and very soon follows the mortification of the skin, to an extent that is always relatively considerable. This last seat of gangrene, then, indicates that the producing cause of the gangrene remains confined to the spongy or cavernous tissues. It is, with one exception, almost always connected with a grave local affection, such as *penitis*. M. Douet, of Angers, has reported a curious example of penitis coming on at the end of an attack of blennorrhagia, and producing sphacelus of the spongy portion of the urethra; the skin preserved its vitality, but the patient, aged eighteen years, was not long in succumbing to the disease.

VARIETIES.—All the forms of gangrene have been observed in the penis. It is necessary, in the meanwhile, to recognize the fact that dry gangrene, that in which the parts desiccate, become dry, is more rare than humid gangrene, in which the parts are gorged with liquids, determining an immediate putrefaction.

Sphacelus, that complete and general state of disorganization of the penien member, has been likewise observed. I have already cited the case of Forestus. In the meantime total gangrene of the penis is rare; it is always connected to a general

predominant state, where wholly other special causes depress the entire organism.

The cause of these different states rests in the textures of the compromised parts. The presence of a loose and very vascular subcutaneous cellular tissue, on the one hand; the existence of a covering, hard, fibrous, resisting, on the other hand, accounts for the clinical facts that are observed every day.

CAUSES.—Gangrene of the penis is rarely the expression of a purely general state, as its causes are more often *local* than *general*.

In the meanwhile these last exist, and, among them, it is well to establish a distinction between the *predisposing* and the *determining* causes.

In the first we find *age, constitution*.

1st. Age. At first sight it would seem that gangrene of the penis would only be observed among adults, when the virile organ acts in the fullness of its functions, and when it is, consequently, exposed to the various lesions which may accompany all functional excess. This is not so, however. Gangrene is almost as frequent among children and old men as among young men or adults.

In early infancy, it is, above all, in the cure of epidemics of exanthematous fevers that one observes this complication; while that, among the old, it is necessary, almost always, that a local cause should intervene. Be it as it may, the adult has the privilege of the lesion we speak of, whatever may be elsewhere the determining cause which has produced gangrene of the penis.

2d. Certain effeminate constitutions, lymphatics, have seemed to offer a particular disposition to this termination. Astruc pretended that, under these circumstances, the more delicate fibres being relaxed, the finer vessels were distended and destroyed by the acidity of the saline that they contained, and that thus was produced the mortification of the tissues, which, in this case, presented a particular œdema. This explanation is altogether hypothetical, and merits confirmation.

Under other circumstances, to the contrary, the gangrene was produced in individuals of a robust, sanguine constitution, and it was no more possible to explain the facts. As either we admit the influence of a lymphatic constitution or otherwise

or that we prove the existence of sugar in the urine, or other general alteration, it is necessary to interpose a nearer cause. It is that which determines the production of this pathological phenomena.

In this second etiological group we find, moreover, the affections which, affecting the entire organism, attack the genital organs at the same time: these are *fevers, intoxications*.

I have already remarked that the ancients made similar observations.

They speak of scarlatina and varioloid, and Hippocrates discourses of a putrid erysipelatous constitution as favorizing the termination by gangrene.

In modern times medical attention has been called to a cure of gangrene of the prepuce coming on in a young and vigorous subject convalescing from *confluent small-pox*. The patient escaped with a slight deformity, and Rostan believed it his duty to attribute this fact to the presence of a pustule developed upon the prepuce in particular circumstances. The narrowing of this last provoked the constriction of this part and brought about the gangrene of which it was the seat.

Boyer reports three cases of gangrene coming on after blennorrhagia complicated with *typhoid fever*. In one there was only sphacelus of the prepuce; in another the glans and a portion of the cavernous body were attacked; the third had the penis entirely sphacelated.

Without doubting the preceding facts, it is well meanwhile to be on our guard against a similar etiological assertion. Under several circumstances the symptoms presented by the unfortunates attacked with sphacelus of the penis have presented a great analogy with those of typhoid fever, and one may take for the effects that which was only the cause. An affection of the penis, as grave as that which we speak of, exercises upon the spirit of the patient such an impression, that it may suffice alone in determining dangerous symptoms. Useless were it to establish a typhoid fever, the prostration, the adynamia being the same thing from the lesion of the penis.

But it is not always so. M. Fauvel has published the case of a young man of twenty-two years who entered his *service* with a clearly characterized typhoid fever. The disease followed its habitual course without presenting any unusual symptoms than

a very marked adynamia, when that, at the end of the fourteenth day, he discovered, by chance, a considerable oedema of the penis. Mortification was not long in coming on; it invaded the whole prepuce, the penis in all its circumference, to the extent of one and two-third inches in length from the beginning of its free extremity. The patient finally recovered from the two affections, and was sent to Vincennes, where he completed his convalescence.

Erysipelas may also produce gangrene of the penis. Berard mentions this fact. But it is rarely that it is the result of simple spontaneous erysipelas. More often the penis presents a pre-existing sore or concomitant phlegmon, which from thence follows the invading and destructive march of the disease. It is above all after operations performed in the neighborhood, in the perineum for example, and followed by erysipelas, that gangrene may be produced.

In this case, moreover, it may be that a general state, epidemic, contagious or otherwise, prevails in the place, and accounts for these things. The erysipelas, then, occupies but a secondary rank in the production of gangrene.

One has proved gangrene of the glans following mucous affections (vidal de Cassis). Finally, *ergot of rye* may sometimes cause the disease. I have met with no case of this kind. But in view of the fact that gangrene of the mucous membrane of the vagina sometimes follows the administration of ergot of rye, we are permitted to conclude as to the possibility of the phenomena in the penis. The rarity of the use of ergot among men, in therapeutics at least, explains why it is not mentioned by authors.

LOCAL CAUSES.—If one has a right to express some doubts as to the direct relation of these general causes in gangrene of the penis, still more so have they as to the local causes. These causes are physiological, or pathological, predisposing or determining. They have always an active part in the production of the phenomena.

The question of *temperature* was very strongly approved by the ancients; they clearly explained how heat or cold acted under these circumstances. These two states to them were sufficient to establish all cases of gangrene, save those which resulted from inflammation or oedema. Fire, said they, burns

the parts; escharotics and caustics eat the tissues; contusions bruise them; freezing destroys them. These brief explanations may have been sufficient at that epoch, but to-day gangrene of the penis can not be explained in that way. It is necessary to examine one by one the circumstances under which it is produced. Phymosis, for a long time, has been said to cause gangrene of the penis.

We find in A. Pare a passage worthy of remark, where the illustrious surgeon sees no other remedy for this disease than amputation, if we would avoid death. Prognosis is not always as grave, and the cases of gangrene consecutive to a phymosis and bringing about death are happily of very rare occurrence.

Phymosis, by itself, accounts for the termination by gangrene: it is not rare, for instance, to observe at the same time a phymosis, a balanitis, or a subpreputial chancre. It is under these circumstances that the liquids secreted by the mucous membrane of the prepuce, or by the chancre itself, accumulate under the prepuce, altering, irritating the parts, inflaming them at the same time, and bringing about rapidly gangrene of the prepuce and of the glans. I had in my *service* in the *Maison Municipale de Sante*, a young painter, in whom the prepuce was completely invaded and destroyed from this cause. Sometimes phymosis only becomes the cause of gangrene, owing to operations practiced upon the penis, in order to remedy this vice of conformation.

Thus I have seen ablation of the prepuce, in this case, followed by gangrene of the organ, and, at the same time, by the death of the patient. The symptoms in this case, were they owing to the operative procedure, to an idiosyncrasy, or to a general predominant state? It is this which is not yet permitted us to prove, and this that new facts will permit us to verify.

Paraphymosis is, moreover, a grievous condition for the production of gangrene. Its influence differs in the meanwhile from that of phymosis. In one case the mortification is generally the doings of a centrifugal action; in the second case it springs from a centripetal action: the result is the same. It has been said that the habit of *masturbation* may bring about gangrene of the penis; the thing is possible, but it is the paraphymosis that has been brought about that produces the mor-

tification. This may besides limit itself to the portion of the prepuce which forms the constricting band, or, to the contrary, attack the glans and at the same time the cavernous body.

TRAUMATIC CAUSES.—Traumatic causes are the most numerous in gangrene of the penis. Among them we will rank those which act from the exterior to the interior, such as compression determined upon the penis by a ring or ligature; those which act from the interior to the exterior, as a calculus arrested in the canal of the urethra or a foreign body introduced into this canal, such as a sound, beans, peas, etc. etc.: finally, wounds, properly speaking, of this organ.

The constriction of the penis by a ring or ligature is a thing, otherwise vulgar, at least frequent. The cases of Lorey and Duchigny are known. I could add to these cases numerous instances from different sources; I will confine myself to a description of the case of Mr. Lexteintuner, of Havre, in which a peasant, believing in the virtues of a ring of his mistress's, passed his penis into the ring, declaring at a later period, that he had been stung by a venomous insect. As poetical as were his intentions, and as original as was his history, he lost nevertheless all the skin of the penis and the anterior part of the scrotum. Scarifications prudently resorted to prolonged his days, and protected him from further danger.

In similar cases traumatism is all obvious, and mortification easily the fatal consequence.

It is not thus when it is brought about by a foreign body introduced into the canal, either by the bladder, as a calculus, or by the meatus as a catheter or foreign body. It is not rare to see gangrene follow an unfortunate catheterism or the retention of an urethral sound. But it is generally upon the old that these unfortunate results are produced, and in these cases it is necessary to seek the true cause either in the retention of the sound, which is too slender or too tight, or in a state of general debilitation, of such a sort that these patients are in some way all disposed to sphacelus.

If gangrene is due to the arrest of a foreign body in the canal, it may happen indiscriminately at all ages. These cases are rare: I know of but one; here it is. I performed the operation of lithotritry lately upon a man aged thirty-two or thirty-three years, very weakly, and endowed with a lymphatic constitution.

The operation progressed finely, when, following a *seance de lithotritie*, a fragment of the calculus, very large and irregular, became engaged in the urethra. The patient made vain efforts to void it; all were useless; it was impacted in the fossa navicularis. For fear of a painful exploration, the patient said nothing; in the meanwhile, after three or four days of suffering, he declared that there was a fragment of calculus arrested in the fossa navicularis which had caused him much suffering. I examined the penis, and was very much astonished to find under a normal prepuce a cold and violet-colored glans. The navicular fossa was distended by a very irregular fragment of calculus. I incised the meatus and removed the fragment of stone, hoping the glans would disgorge itself and resume its normal tint: it was in vain. At the end of some days the glans and urethra, to the extent of three or four centimetres, sloughed away. The unfortunate young man fell into a state of melancholy and discouragement, and finally died. The autopsy revealed a nephritis and a chronic cystitis.

In presence of this case one can not doubt the traumatic cause of the gangrene; the compression was made from the interior to the exterior—that's all.

Dr. Gaspard, of Fransac, has published a very interesting case in which this mechanical cause is still more obvious. It happened to a vine dresser, aged fifty-seven years, who had stuffed his urethra with marsh beans; naturally there followed a retention of urine and inflammatory symptoms; but the predominant phenomena was that of gangrene at the point of contact of the beans and the urethra. After having seen sphacelus invade the entire penis and the scrotum, the unfortunate patient expired.

Sores of the penis which may produce gangrene are of two sorts: either they are spontaneous, as a chancre or any other ulceration, or they are the work of a traumatism. In the first case the sore ulcerates, assuming a phagedenic character; it gains more and more, invading the tissues, destroying the vessels, bringing about hemorrhages, and finally produces gangrene. Its invading march destroys more quickly than it repairs, and it is not rare to see a great surface rapidly mortified by an ulceration attacked by phagedena.

Generally it is not these sores which produce gangrene of the

penis, and the more often it is the cutting instrument which, dividing the vessels, produces the phenomena of mortification. Dr. Vedrenes has published the extremely interesting case of a Kabyle, whose wife, after seven days of marriage, divided the penis at its base. A transverse wound, with complete section of the cavernous body and the largest part of the circumference of the urethra, had been inflicted upon the penis while in a state of erection. Considerable hemorrhage followed, which was with difficulty arrested. A suture was soon applied; nevertheless, there followed dry gangrene of the glans and of the urethra. The mutilated unfortunate in the meanwhile convalesced; he was cured at the same time so well that nine years later there appeared almost no signs of the injury left; he was father of a family, and had forgotten at what epoch the accident had happened to him.

Since, then, as we find in such wounds of the penis sufficient reasons for explaining gangrene, the possibility of sphacelus is found still better explained when it is caused by contused wounds of this organ. There is in effect, in these latter cases, contusion, rupture, sometimes attrition of the parts; these causes are more than sufficient for the production of mortification.

But it is not always necessary to recur to the existence of a visible wound in order to see the manifestation of gangrene. At the beginning of my medical studies, I saw in the *service* of Blondin a young man die of a gangrene of the penis; during erection he had had the penis twisted, and from it resulted fatal gangrene. It had doubtless produced a fibrous rupture, at the same time a vascular one; the symptoms had thus proceeded from the interior to the exterior, as in the preceding case. This hypothetical explanation is, may be, not necessary; above all, if we remember that Hunter has seen gangrene of the penis occur in a dog affected by priapism, is there truly the spasm of the small vessels that this surgeon admits? who says spasm solves not the question. Whatever it may be, priapism among men is not generally accompanied by gangrene. I can not, at least, find any case that comes to the support of that of Hunter. The only case, in my knowing, approaching that observation is that of Richet; but this patient only presented a demi-erection, and not a state of perfect priapism.

(To be concluded in our next.)

MEDICAL GLEANINGS.

APHASIA AND HEMIPLEGIA AFTER SCARLATINA.—Dr. Eulenberg presented to the Society a boy, aged eight years, who had had scarlatina two years before. In the sixth week convulsions and coma appeared, and subsequently paralysis of the right side of the body and face, with aphasia. The paralytic symptoms nearly disappeared in two weeks. The boy speaks only two words—"ach," which he always uses for "nein," and "ja," which he applies to all other uses. The fact that dropsy and albuminuria had existed induced the author to infer the presence of softening of the central organ of speech, of a dropsical or necrotic character, referable to anemia. The prognosis in respect to the aphasia was doubtful. It is not stated whether the boy had had endocarditis.

DIFFUSED SCLEROSIS OF THE BRAIN AND CORD.—The author communicates three very accurately observed cases concerning this disease, which is frequently noticed in France, but in Germany is seldom observed and diagnosed during life. He shows that the diagnosis is not so difficult, because there are very characteristic symptoms which do not allow of a mistake in a diagnosis. The chief symptoms of diffused sclerosis of the brain and cord are: The characteristic trembling of the more or less paralytic extremities, and head, during movement, which latter are contracted disturbances of vision, presence of trouble in speech, the disproportion between the diminution of the motor power and the usually unimpaired sensibility; finally, the presence of pain in the limbs and head, vertigo, cramp-like contraction of the lower limbs, paralysis of the hypoglossal, facial and accessories, and disturbance of respiration. The author from his cases can draw no conclusion as to successful treatment.—*Deutscher Archives.*

ORCHITIS.—M. Besnier has found a simple method of treatment so successful in orchitis of all kinds, that he thinks it proper at once to submit it to the consideration of other medical men.

The patient is kept at rest, the scrotum is raised, and compresses steeped in a concentrated decoction of the leaves of digitalis are kept constantly applied. The compresses applied may

be either lukewarm or cold, and are taken off when they begin to dry. The application must be kept on incessantly. With some folds of cloth under the pelvis, and some waterproof around the wet compresses, the application can be carried on with little inconvenience to the patient.—*By Prof. Villemin in Dr. Dobell's Reports.*

ARSENIC.—From the time of Bielt, who had adopted from English physicians the use of arsenic in skin diseases, this remedy has come into vogue. It is now recommended in a great variety of maladies, such as intermittent fever, phthisis pulmonalis, asthma, chorea, epilepsy, angina pectoris, whooping cough, chronic rheumatism, dyspepsia, diarrhea, cancer and cholera. This great diversity in its use leads us to believe that, like almost all useful medicines, arsenic has its day of fashion.

Though so much used, the rules for the administration of arsenic do not seem to be yet fixed. M. Divergie shows that, in prescribing arsenic, little distinction is made between its different preparations, and that the same dose is almost always given from the beginning to the end of the treatment.

It is not very reasonable indifferently to prescribe the same doses of arsenious acid in pills or powder, dissolved in water, or in combination with potash, soda, and ammonia, or the arseniates of potash, soda, and ammonia in solution, or in cigarettes, and even the insoluble arsenite and arseniate of iron.

Arsenious acid occurs in three forms: in vitrified pieces; in powder more or less coarse; and in very fine powder.

M. Divergie draws the following lessons from what he has observed in cases of poisoning.

1. Arsenious acid, in pieces, or in coarse powder, does not in general act upon the body till it is absorbed.

2. Arsenious acid, in fine powder, acts directly on the stomach and intestines, and also on the system when absorbed.

3. In spite of what has been deduced from many experiments upon animals, facts which I have observed in suicide and criminal poisoning, as well as in the medicinal use of arsenic pushed to *saturation*, have convinced me that there are two distinct ways in which arsenic acts. It acts directly on the organs with which it comes in contact, and it acts generally upon the economy when absorbed.

4. In using arsenious acid as a remedy in the solid form, we

ought to remember that there exists a considerable difference between the acid in the form of coarse vitrified powder and impalpable dust.

If arsenious acid be given in solution, its action varies with the amount of the solvent.

Arsenious acid, as experiments prove, if given in a state of combination with another substance, acts much more energetically; therefore, in prescribing arsenious acid, and in prescribing Fowler's solution (which is arsenious acid, but in a state of combination much more active in its effects), if we give the same dose of both, we are administering two preparations of different activity. It is certain we may give arsenious acid either in the solid state or in solution in considerably larger doses than that of Fowler's solution.

From this we may conclude—

1. That the activity of arsenious acid in the solid state becomes greater by minute division, and that the dose ought to vary with the degree of division in which it is administered. But as we are never sure of the firmness or coarseness of mechanical trituration, it is best not to employ arsenious acid in the solid form.

2. Arsenic, when given in solution, varies in the energy of its action according to the amount of fluid in which it is dissolved.

3. Not only is the action of arsenic modified by the form in which it is given, but when it enters into combination with an alkali to form a new salt, its energy is increased instead of diminished, as is generally the case with bodies possessing caustic properties.

4. When arsenic is combined with oxide of iron, the result is an insoluble compound, whose effects on the body are much milder, so that to produce the same effects the doses ought to be larger. The same is the case with arseniate of iron, which is also insoluble.

With regard to the manner of administering arsenic, M. Devergie remarks a great diversity in the prescriptions used, and thinks it a mistake to continue to give arsenic without success in unvarying doses. Arsenic should, in general, be given in progressive doses.

Some physicians order arsenic to be taken on an empty stomach; others along with the food. M. Devergie considers

this latter practice erroneous. From thousands of experiments on animals, it has been established that medicines of every kind, especially those that are capable of being absorbed, have their action much weakened when mixed with alimentary substances. —*Prof. Villimin in Dr. Dobell's Reports.*

ALBUMEN IN URINE.—Urines with a small amount of albumen (from one to six grains in the twenty-four hours,) more or less strongly colored, and of a specific gravity, either normal or, still better, increased, exclude with almost absolute certainty the possibility of any serious injury to the parenchyma of the kidneys, and indicate, on the other hand, either certain febrile diseases, as, for example, typhus and pneumonia, or else those diseases of the heart, liver, spleen, etc., which are capable of mechanically obstructing the course of the blood in the renal veins.

2. Urines with a medium amount of albumen (from six to twelve grammes in twenty-four hours,) somewhat discolored, and of a specific gravity somewhat diminished, indicate the first stage of chronic Bright's disease.

3. Urines with a large amount of albumen (from twelve to thirty grammes in twenty-four hours,) much discolored, and of a specific gravity somewhat diminished, indicate, with a certainty almost absolute, the second stage of chronic Bright's disease, called hypertrophic.

4. Urines with a moderate amount of albumen (from six to twelve grammes in twenty-four hours,) almost entirely colorless, and of a very low specific gravity (from 1.005 to 1.010) indicate the last stage of chronic Bright's disease, called atrophic.

5. Apart from all the above mentioned distinguishing characteristics between the albuminuria of Bright's disease, and the so-called passive or symptomatic forms, there is another still more important, which consists in the proportions that is found of urea and the urates; when this proportion is very small, it marks in the strongest manner the first species of albuminuria; when it is normal or increased, it marks in the same manner the other species in general.

6. When albuminuria is accompanied by cardiac disease, it is easy to recognize whether the former is the effect or the cause of the latter; for while, in the first case, the urine has all the

characteristics of symptomatic albuminuria, in the second case it has, on the other hand, all the characteristics of the second or third stage of Bright's disease.

7. Albuminuria in acute articular rheumatism, marks with great probability, the development of pericarditis.—*Dr. Gaetano Primavera, quoted by Dr. J. B. Summitt, of Naples, in Dr. Dobell's Reports.*

TRAUMATIC ANEURISM OF THE INTERNAL CAROTID ARTERY, THE RESULT OF A PUNCTURE.

By W. T. BRIGGS, M. D., Professor of Principles and Practice of Surgery in the University of Nashville.

Thomas B——, aged 23 years, was admitted into St. Vincent's Hospital on the 22nd of February last, on account of a tumor in the left parotidean region. The tumor was as large as the closed hand, circumscribed—smooth upon its surface, with a strong expansive pulsation when the hand was pressed on it. The swelling was lessened by pressure on the common carotid, and a loud bruit was heard when the ear was applied. Upon the anterior part of the swelling was a wound half an inch in width, in a state of almost complete cicatrization. The patient complained of great pain and tension in and around the tumor, with difficulty of swallowing. He was feeble, with frequent, quick pulse, pallid countenance, no appetite, and was very apprehensive about his condition.

Upon inquiry, it was learned that about six weeks previous he had received a stab at the point now marked by the cicatrix, which had bled freely at first, but was easily checked by pressure of the hand. On the following day his wounds were dressed by Dr. Sneed, with the compress and bandage. In a few days afterwards, hemorrhage occurred, which was arrested before Dr. S. reached him.

Several times during the next few weeks, the hemorrhage recurred, but was each time easily restrained by pressure. Two weeks since, the Doctor recognized the formation of the aneurismal tumor, and called me to his assistance.

We thought it best, at the time, to try the effect of continued pressure over the tumor, but finding that it was enlarging daily, and the skin becoming thinner, especially at one point, it was determined that an operation was imperatively demanded.

The patient was therefore admitted into the hospital, as before mentioned, and the next morning was appointed for the operation.

Fully aware of the gravity of the case, and the great responsibility involved—two lives, possibly, depending on the issue,—I

sought the assistance of several of my professional friends, to whom I am much indebted for very valuable aid. In consultation, it was determined to make an incision into the tumor, turn out the clots, and try to ligate the artery wounded; and if the artery was so deeply seated that it could not be found, or reached, to ligate the common carotid.

The patient was brought into the amphitheatre of the College, before the class, and anæsthetized with ether. Having been placed on his back, with his head turned toward the opposite side, I pushed the knife into the most prominent part of the tumor, and followed it quickly with my finger, so as to prevent the loss of blood. I then searched through the sac for the wound of the artery. I failed to satisfy myself of the position of the wound, but felt the pulsation of a large vessel, which I supposed to be the external carotid. Keeping my finger steadily on this vessel, I enlarged the opening into the sac upward and downward. Immediately large clots were discharged, followed quickly by a furious gush of arterial blood, which I arrested by stuffing compressed sponge into the cavity. Withdrawing the sponge, one part at a time, I attempted to get my finger on the wound of the vessel, which, after another terrific gush of blood, I succeeded in doing. It was not, however, until my finger had passed its full length into the wound, and was pressing against the vertebral column, that the effusion of blood was checked. In view of the depth of the vessel, and its confined position between the ramus of the jaw and mastoid process, I again stuffed the cavity of the sac with compressed sponge, and proceeded to ligate the common carotid artery, at the point of election, in the usual way.

On the removal of the sponge from the wounded artery, the hemorrhage was as violent as before. I plunged my finger into the cavity of the sac, and at once arrested it. Dr. V. S. Lindsley then compressed the opposite common carotid, so as to cut off the blood from that source; but the effusion of blood, when the pressure of the finger was relaxed, again returned.

Satisfied that nothing but a ligation of both ends of the wounded artery would arrest the flow of blood, I held my finger on the aperture of the vessel while I divided all the tissues between the two incisions I had already made, making a wound fully seven inches long. The edges of the incision were held apart with curved spatulæ. The angle of the jaw was found very much in the way, and the propriety of sawing through it, so as to turn it aside, was considered; but I concluded to make the attempt to apply the ligatures first without. The forefinger of the left hand was kept on the mouth of the wounded artery, while the tissues on each side were divided, by scratching through with the blunt edge of the knife, held in the right hand. The artery needle, armed with silk ligature, was then guided by

the finger that rested on the artery, passed around it, and it was drawn out so far as to show that nothing else was taken up with it, when the needle was withdrawn, and the ligature tied on the distal side of the opening. I could now remove my finger with impunity. Another ligature was applied on the proximal side of the wound in the artery. Several smaller vessels, which bled when all pressure had been removed, were ligated, and the clots of blood sponged out, and we could now see what had been done.

In the upper part of the wound the parotid gland had been spread out by the aneurismal sac, so that it could not be recognized; but at its lower part, it had been divided through its middle; of course the branches of the facial nerve had been divided, causing paralysis of the muscles supplied by it. In the bottom of the wound the styloid process could be seen and felt, while just anterior and internal to it, the ligatures were seen coming from the artery. All the parts around were covered over with the smooth serous-looking membrane, that lined the sac.

The ligatures having been brought out, the extensive wound was brought together with the silver suture and adhesive plaster.

The patient bore the protracted and tedious operation very well, and has not had, up to the present time, (the tenth day,) an unpleasant symptom. He suffers no pain, sleeps well, has appetite, etc. etc.

These cases of false aneurism are the most troublesome and responsible with which the surgeon has to contend. The doubt as to the artery wounded, the almost inevitable hemorrhage which occurs upon opening the sac, and the danger of the patient dying on the table, causes him to wish that they had fallen into some other hands than his. In the case under consideration, it was impossible to say what arterial branch had been punctured; but, from the size of the tumor, and from its strong pulsation, it was presumed to be one of considerable magnitude.

Preparations were made to meet every emergency, yet the hemorrhage, upon opening the sac, was appalling, and many of the students left the amphitheatre under the impression that the patient would die on the table.

The arterial lesion proved to be in the internal carotid, and the ligation of the common carotid had no effect, even to moderate the current of blood passing on. Neither did perfect compression of the opposite common carotid control the hemorrhage, though it did lessen it to some extent. The vertebrals still carried enough blood into the terminal branches of the internal carotids to have given rise to a fatal recurrent hemorrhage. The patient's life depended on placing ligatures on the artery above and below the wound. Guthrie has immortalized himself by proving that, in wounded arteries, hemorrhage will recur even

after the ligation of the main trunk, whenever the collateral circulation is sufficient to maintain the life of a part, and that the only prevention is the application of a ligature on each side of the wound in the vessel. This is indeed the golden rule, to which there are very few exceptions. When it is *impossible* to reach the wounded artery, we *have* to depend on the Hunterian operation, but it is a poor dependence. Yet we find that many modern works on Surgery still advise the Hunterian operation in traumatic aneurisms.

In the article on Traumatic Aneurism, in "Holmes' Surgery," written by himself, he says: "If, therefore, the tumor be deeply seated, and it would be difficult to expose the vessel, as it leads into it, no hesitation need be entertained in trusting to the Hunterian method; while if (as is usually the case at the bend of the elbow) the tumor, and the artery on which it is seated, be superficial, the old operation of opening the sac, and tying both ends of the vessels, offers no special difficulties, and is certain to succeed." * * "Still, the great majority of traumatic aneurisms have yielded to the proper application of pressure, and few of those which have not done so, are known to have resisted the Hunterian operation. It is only in cases in which the tumor is superficially seated, and the operation comparatively easy and bloodless, that the majority of surgeons would prefer the old operation."

Erichsen, in his most excellent work on Surgery, advises, in diffused traumatic aneurism, laying open the tumor, and ligating the artery above and below the wound in it; but when there is a circumscribed aneurism, more especially when the sac is formed by dilatation of the cicatrix in the external coat and sheath of the artery, he recommends ligature, or compression of the artery leading to the sac. Many other authors advise the application of the ligature above and below the aperture in the vessel, if it can be *easily* done, but intimate that the Hunterian method will be sufficient, if it cannot.

My experience sustains the teachings of Guthrie, that there is no assurance against hemorrhage in traumatic aneurism, whether diffused or circumscribed, except by a ligature above and below the wound in the vessel. A case which came under my observation during last summer will serve as an illustration.

A young man let his knife, which he held open in his hand, fall, the point entering about two inches below Poupart's ligament, directly over the Sartorius muscle, passing obliquely downward and inward to the extent of an inch or more. A gush of arterial blood escaped at the time, but hemorrhage was arrested by pressure, and the wound healed promptly. In a few days afterwards, an aneurismal tumor formed at the point of injury to the artery, as large as a goose egg, and perfectly circumscribed.

Four weeks after the injury, the skin over the tumor becoming very thin, I was summoned to operate. Making an incision over the tumor from the upper to the lower part, the femoral artery was exposed just as it entered the sac. I placed a ligature on it at that point. Every physician present was satisfied that there would be no hemorrhage when the sac was opened. To prove to them that there would be considerable hemorrhage from the lower end of the artery, I placed a tourniquet on the limb below the wound, loosely, with directions to my assistant to tighten the moment I made an incision into the sac. As soon as I did so, a few clots were discharged, and then a stream of blood was thrown three or four feet in height, which was promptly arrested by screwing up the tourniquet, when I proceeded to sponge out the sac and place a ligature on each side of the puncture in the vessel. The patient was well in a short time.

I will allude to another case, which occurred in my practice several years since. A gentleman received a gunshot wound in the inner and upper part of the thigh, the ball ranging inward toward the femoral artery. In a few days, a circumscribed aneurism formed just below Poupart's ligament. I ligated the external iliac artery. The tumor was very much diminished in size, and its pulsation almost checked. Four weeks afterwards, the sac having inflamed and suppurated, it opened spontaneously, and such a discharge of blood followed as reduced the patient to an extreme condition before the nurse, who had been fully instructed, could arrest it by pressure. When a free incision had been made into the sac, the wound of the artery was found, after a tedious search, and a ligature applied to the lower end of the artery. He recovered after an illness of two months or more.

In the present case, I applied a ligature to the common carotid because it did seem almost impossible to put a ligature on the wounded artery before the patient would bleed to death. Finding, however, that it did not control the hemorrhage, I was compelled, of necessity, to ligate the vessel in the wound, which was effected only after great difficulty.—*Nashville Jour. Med. and Surg.*

THE CINCINNATI HOSPITAL AND ITS MANAGEMENT.

To the Editor of the Cincinnati Gazette.

Mr. B. F. Brannan, the Secretary, appeared before the readers of the *GAZETTE*, Saturday, with his Annual Report on the Hospital Administration. Nothing could be more characteristic than this epistle. It betrays throughout that turn for plausible statement, that abhorrence of actual fact, and that profound and hopeless ignorance of the sub-

ject which Mr. Brannan always exhibits when he commits himself to paper on hospital affairs. Afflicted with the predominant idea that he "runs the hospital," he contemplates, with an enormous and ever increasing admiration, his great importance in connection therewith. Not only is Mr. Brannan thoroughly satisfied with himself, but he calls on the "tax payers" to take "a just pride in an institution which is unsurpassed by any other hospital of the kind in the world." One year ago in his annual report our hospital Secretary desired the tax payers to be pleased with the economical manner in which their money had been "diffused," but now he appeals to their æsthetical sentiments—to their municipal pride. Evidently Mr. Brannan thinks that a burst of his euphonious platitudes will charm the "tax payers," and cover in a blaze of glory his financial and administrative eccentricities.

Quitting for the time being Mr. Brannan's eloquence—we presume he means to be eloquent—let us examine some of the statements which he has submitted to the public. He informs us that "the cost of maintenance for the year" was \$81,356 39. Last year the "cost of maintenance" was \$75,148 52. In the report for 1868, I find "the total net expense for the year" stated at \$53,986 92, and including \$14,876 88, debts contracted previously to that year, "the total expenditure" at \$68,863 80. In three years, therefore, the expenses—cost of maintenance—have risen \$27,370 47. In view of this alarming increase in the annual expense, it is not surprising that Mr. Brannan now appeals to the "public heart" rather than to the public mind. There are some facts in regard to cost which the eloquent Secretary can not be induced to remember. As the expense of construction of the hospital was \$800,000, the people of Cincinnati paid last year about \$60,000 in interest, and this item should be added to the cost of maintenance, making the very respectable sum of \$140,000 as the actual outlay on the hospital account.

The Trustees have been charged with reckless extravagance in building a hospital having a capacity twice as great as our needs. Mr. Brannan admits the justice of this accusation when he informs the tax payers that two of these wards have been converted into rooms for private patients, with the view of reducing the expenses. As rooms were provided for this purpose in the administration building, and as the annual expenses have steadily increased, notwithstanding, it is a reasonable presumption that the additional outlay required by this reconstruction will *not* "reimburse the cost of the improvement." It is highly improbable that such an institution, managed in such a manner, can compete successfully with private hospitals, as the Good Samaritan, for example, in the case of private patients. Neither is it just to use a public hospital, supported by all classes of tax payers, in competition against private and denominational charities. The annual waste, or unused space, which they are thus trying to utilize is about \$22,000. Mr. Brannan is silent on this topic.

The number of patients treated last year is stated at 3,187, but Mr. Brannan does not inform us to what extent these numbers have been manufactured. I have shown in a previous letter that the number of patients on which they base their statistics of "actual cost" is made up by including "infants born in the house," and by counting as a *new admission* every case transferred from one ward to another. Neither does Mr. Brannan inform us how many hundreds of eye and

ear cases, of skin diseases, of venereal affections, are included in these figures. Last year the people of Cincinnati paid about \$20,000 for housing and subsisting syphilitic cases alone!

Mr. Brannan indulges in some enthusiastic observations on the clinical instructions at the hospital, which indicate his absolute ignorance of modern requirements. "The staff have delivered a thorough course of clinical lectures," he informs us. If Mr. Brannan does not know it, he can easily ascertain that some of the lecturers are utterly incompetent, and that the course, as a whole, is extremely unsatisfying to the medical students. He omits to state that the hospital class is made up from the various medical colleges of the city, whose students attend these clinics because there is no other hospital at which they can be admitted, and he attempts to create the impression that students are attracted thither by the reputation of the hospital. The medical students in Cincinnati last year were not equal in numbers to those present at various times within the past twenty years. "Every facility will be given to enlarge the advantages of clinical instruction, so as to attract to this city, for medical education, students from the whole country, which it is believed will ultimately make Cincinnati the medical center of the United States." This remark indicates that Mr. Brannan is entirely unacquainted with the relative acquirements and ability of the lecturers, and with the advantages offered to students in the various cities of the United States, and the remark itself is so absurdly extravagant that it exposes our city to ridicule.

To make the Cincinnati Hospital a medical center it is necessary to provide suitable material for a clinical course, to organize a corps of lecturers, informed in the various specialties of medical science, and able to teach in an attractive and methodical manner. The Trustees make no sincere effort in these directions. To places on the staff they appoint their friends and intimates, or the representatives of a certain clique. As they are bound together in a "ring" of personal and family ties, they have not the moral courage, if they had the inclination, to rid the staff of incompetent material. Assume Dr. John Davis, for example to be wanting in knowledge or incapable as a lecturer, how shall the Trustees get rid of him when his brother, Dr. Wm. B. Davis is a member of the Board? If Dr. C. G. Comegys were shown to be incompetent, how could he be dismissed, seeing that his partner, Dr. Judkins, and his special friend, Mr. Brannan, represent his interests in the board? Even if Dr. John A. Murphy should enliven the lecture room with the tricks of a low comedian, how could his position on the staff be affected, when it is maintained by the active interposition of his friend, Mr. Brannan? Again: should the mental organization of, say Dr. Mendenhall, render him incapable of performing his appropriate service in the house, how could his retirement be effected, when his relative, Mr. Carlisle, is an influential member of the board. To take another illustration—suppose Dr. C. P. Judkins should be disqualified for his duties as physician to the Roh's Hill Branch of the hospital, who in the board shall move for his dismissal, in the magnificent presence of his brother, Dr. David Judkins, a member of the board?

These instances of nepotism illustrate, at the same time, the inspiration of Mr. Brannan's fulsome eulogy of the staff, and the hopelessness of any attempt, under the present administration, to improve the character of clinical teaching.

ROBERTS BARTHOLOW, M. D.

ANNUAL MEETING OF THE OHIO STATE MEDICAL SOCIETY.

The annual meeting of the Ohio State Medical Association commenced April 4th, in Hopkins' Hall. The attendance of members was quite large, there being something over one hundred present, a large portion of whom are from points outside of the city. The delegates are, moreover, a superior looking set of men, and the profession may well be proud of them.

The Convention was called to order by the President, and the meeting was opened with prayer by the Rev. Dr. Briggs.

After the devotional exercises had been concluded, the Executive Committee offered its annual report through its chairman, Dr. Stevens. It suggests that during the meetings of the Society they convene at 9 o'clock A. M. and 2 o'clock P. M., each day.

That on Wednesday, at 9 o'clock A. M., the Society have its annual election of officers; that at 11 o'clock A. M. it visit the Cincinnati Hospital, and at 3 o'clock P. M. the President's annual address be delivered; and finally, at 9 o'clock P. M. the Society attend the banquet to be given them at Odd Fellows' Hall, Covington.

That Thursday forenoon be devoted to finishing up the business of the meeting, and that Thursday afternoon be devoted to an inspection of the Water-works at Covington.

The report was adopted.

Following this, Dr. E. B. Stevens, of this city, made the address of welcome to the members.

The Treasurer, Dr. Thompson, made his annual report, which showed that during the past year the total receipts had been \$997 46, expenditures, \$869 18; leaving a balance in the treasury of \$128 28.

He urged that it would be necessary to make the annual fees from members somewhat larger to meet the expenses of the Society.

Dr. Dawson offered a motion that the Kentucky State Medical Society, now in session at Covington, be invited to visit this Society during its stay in the city, and take part in its deliberations. Adopted.

At the suggestion of Dr. Davis, Drs. Wright, Woodward, Kinkaid, and Stevens, all of whom are ex-Vice Presidents of the society, were named as the committee.

Reports from the various standing committees were called for, and some of them handed in, while others asked that further time be granted. The reading and consideration of them all was, however, postponed for the present.

The list of special committees was called, and such of them as reported themselves in readiness had times assigned to them.

The Committee on Admissions reported the names of the following applicants for membership, and recommended their election, viz. Drs. P. M. Brignery, W. Stark, C. A. Miller, William Carson, J. W. Hadlock, Warren Woodward, L. C. Herrick, E. L. Shackel, H. Senseman, Henry S. Juvett, W. W. Seeley, D. J. Snyder, John R. Woods, Horace Luddington, Byron Staunton, E. G. Comegys, F. W. Larimore, C. D. Palmer, E. R. Lang, A. Titus, L. A. Cottle, W. H. Campbell, G. B. Orr, W. A. Carmichael, R. McD. Gibson, and E. Y. McCullom.

The report of the committee was adopted.

While this business was being transacted, a large number of dele-

gates bearing certificates from the County Medical Society were reported and admitted to the deliberations of the Society.

The Chairman announced that the Special Committee on Sanitary Science, Dr. J. R. Black, of Newark, would make his report. Dr. Black not being present, the Special Committee on Physical and Vital Force, Dr. S. S. Scoville, of Lebanon, was called upon for his paper.

This gentleman read his treatise on the scientific topics of the day, and was listened to with close attention by all his hearers.

Dr. J. A. Little read a paper on opium and belladonna.

Dr. W. H. Mussey read on the importance of surgery, and Dr. J. R. Black, of Newark, one on sanitary science, all of which was listened to with close attention.

THE BANQUET.—In the evening the Kentucky and Ohio State Societies were entertained by the profession of Cincinnati, at Hopkins' Music Hall, where an excellent repast had been prepared. The tables were heavily laden with delicacies of every description—the decorations by the Kepler brothers being especially tasteful in design and handsome in execution—and the supply of wine, still and sparkling, was unlimited.

Dr. Reamy, of Ohio, and Dr. Atkinson, of Kentucky, were the Presidents of the evening.

Dr. Chas. Woodward, of Cincinnati, delivered the address of welcome; and after the Divine blessing had been invoked by Dr. Worrell, of Covington, the discussion of the bill of fare was commenced.

The address of welcome by Dr. Woodward was as follows:

Gentlemen, Members of the Ohio State Medical Society:

I have this evening imposed upon me by your Committee of Arrangements the very pleasing duty of extending to you, one and all, a hearty welcome to the banquet prepared for you on this occasion.

To what cause I may ascribe the honor I have had conferred on me I cannot tell, unless it be referred to that kind and courteous consideration that has for so many years been extended to me by the members of our honored profession. Perhaps it may also in some degree be ascribed to that well known principle of our nature, that in contributing to the happiness of others we learn to continue our favors from the reciprocated pleasure we experience in our own souls by so doing. The fact that by the suffrages of the members of this society I once had the exalted honor of occupying its Presidential chair may, according to this principle, offer an additional reason why this evening I enjoy my present place of honor.

But to whatever cause I may attribute the favor thus bestowed upon me, it is no less my duty than my very great pleasure to extend to you all a cheerful welcome to our family reunion to night.

The laborious duties of your annual session, which commenced this morning, will demand of you the strict devotion of your time and all your mental energies, to promote the advancement of your favorite science and to increase in some small degree at least, the general happiness of mankind. These objects are, indeed, the chief causes of our yearly meetings, and their vast importance cannot be too highly appreciated by us. To neglect them would necessarily lead to self-reproach, and the condemnation of our associates in medical literature. But while we attend faithfully to these assumed responsibilities, it would be well for us to remember that there are, also, certain social elements in our yearly gatherings, which, though of secondary importance, should not be entirely ignored. We allude, of course, to

our periodic reunions, such as the Ohio State Medical Society has always endeavored to perpetuate, not only for the increase of medical knowledge, but for the purpose of friendly communion also, and the reciprocation of such courtesies and kindnesses as are calculated to unite our souls and bodies in one common mold. It has been well observed "that the idea of our profession is that of complete oneness." What is scientific truth for one, is scientific truth for all. We have one common estate in facts, aims and purposes that belong to the science of medicine, and hence we do a wise thing when we acknowledge the exalted unity of the medical profession, and endeavor to confirm it by our annual reunions, through which we can so easily exhibit intellectual fraternity and cordial heartfelt sympathy with one another. Forgetting then for a short time the dogmas of the schools and the theories we have built up for ourselves, whether upon a true or false experience, and feeling toward each other the kindest sentiments, let us surround our family table and eat and drink at the fountain of a brother's hospitality.

May you all feel that you have received a welcome greeting at our evening board, not as strangers requiring a formal reception, but as friends and brothers, who after an absence of seventeen long years, have once more returned to a central home to participate again in the pleasures of the family fireside. We feel this evening that you have come to us as a part of a long severed family, to rejoice with us in our prosperity, and to mourn with us over our diminished circle. To-night you will be conscious of vacant places at the table that were, at your last meeting, filled by those whose genial smiles and cheerful voices added so much to increase the general glee. Many of these have been buried out of sight, but they are not forgotten by us, for their virtues are yet green in our memories, and their living works still testify to their skillful benevolence. * * *

Gentlemen of our State Medical Society, we also greet and welcome you on this occasion as the active co-workers of our Association. You have often met each other in friendly debates on subjects of scientific interest and of public utility, and by your wise suggestions have aided to modify the hygienic laws of our State, so that in our towns and cities especially, life has been prolonged and infant mortality greatly diminished; you have by your moral influence, modified, for the better, the hideous aspect of the social evil, which unfortunately for the welfare of our cities, you cannot entirely eradicate. You have been the promoters of many other useful measures for the general good, but your best endeavors have not always been productive of expected benefits. Let not these failures disappoint you, for such have often been the result of the philanthropic efforts of the most sagacious minds, but whose renewed and well directed struggles have subsequently led to very successful issues. Continue then to exert all your energies to advocate those moral and physical laws in the legislative halls and elsewhere, that our recent experience has shown us to be of such vital importance to the welfare of humanity.

To our city friends and associates I have but little to say on the subject of friendly greeting except that it should be your pleasure, as well as your duty, to feel that all of you are the hosts of this occasion. Then extend the friendly hand and greet with the cheerful smile your guests to-night, and for one, if never again, let all our intercourse be attended by love, and charity and good will; let our intercourse this evening fill us with friendly emotions, and sentiments

of cordial sympathy, and let all our old contentions, if any still survive, be buried in perpetual oblivion.

On this subject of professional unity, Gentlemen, I feel like one speaking with the authority of an elder member of the household, for I am not aware that there is *even one* before me who has patrolled these streets doing faithful medical service to its citizens for forty-five years, except myself. As the representative of the profession of 1826, I believe I stand alone; my then cotemporaries have one by one fallen around me or moved to other fields of action. Few, I presume, survive anywhere; but my memory runs back through this long dream of life, filled with the specters of my teeming fancy, and like the vision of the prophet Samuel, when remanded from his resting place at the command of a disconsolate King, there rises before me the phantom shapes of the great, the good, and the generous of our holy profession who have passed to their final reward before me. The names of all these worthies I can not enumerate, still less can I recollect their histories or their virtues; to tell their names alone would be difficult; to tell their numerous virtues impossible, for their names would be legion.

We will not then more widely unroll the historical canvas to expose to your gaze the flitting shadows of an almost forgotten age, though the picture would be filled with scenes of mournfully pleasing interest to you all, lest the present, with all its blessings and its triumphs, should be forgotten, and our memories, for this occasion at least, be too much buried in the past.

Let us then rather enjoy our present family re-union, in cultivating stronger fraternal sympathies, and expressing to each other sentiments of esteem and friendship calculated to unite our hearts forever in the bonds of charity and good will.

Upon our return to our active duties, refreshed by our temporary freedom from professional solicitude, let humanity to the suffering poor be our watchword, and our private interests ever be made subservient to the public good, so that we may all feel in our "sere and yellow leaf" that we have truly fulfilled the great trust committed to our care.

SECOND DAY.

Dr. Rickard, of the Union Medical Society of Indiana, was introduced and invited to a seat on the platform.

Dr. Pool, of Parkersburg, West Virginia, was also introduced. The latter said: "For some time past there has been an interchange of courtesies between the Medical Associations of Ohio and West Virginia. It is flattering to see the sons of Ohio and Virginia come together upon such occasions as this. There are advances that have been made during the last few years that compel us to meet together to again study and seek for further knowledge."

For President, Dr. Herrick, of Cleveland; Dr. W. W. Dawson, of Cincinnati; Dr. C. P. Landon, of Westville, and Dr. Gundry, of Dayton, were named.

Dr. Landon gracefully declined the nomination.

The first ballot resulted as follows: Herrick 51; Dawson 45; Gundry 6.

Dr. Gundry withdrew his name.

The second ballot resulted as follows: Herrick 52; Dawson 59. Dr. Dawson was therefore elected.

On motion, his election was made unanimous.

For Vice Presidents—Dr. R. Worth, of Columbus; Dr. Landon, of Westville; Dr. Kay, of Springfield; Dr. Beldon, of Urbana; Dr. Sennett; Dr. Little, of Delaware, and Dr. H. C. Pierce, of Urbana, were named.

Drs. Kay, of Springfield, C. P. Landon, of Westville, Sennett, of Granville, and Russell, of Mt. Vernon, were declared elected.

The vote for Secretary came next. There were several nominations.

Dr. Hall, the Secretary for the past two or three years, was re-elected unanimously.

On motion, Dr. Hadlock was elected as Assistant Secretary by acclamation. Dr. Thompson, of Columbus, was elected Treasurer and Librarian.

For Board of Censors—Drs. Little, Pearce, Gray, Baker and Black were elected.

Portsmouth, Yellow Springs, Newark and Dayton were spoken of as the next place of holding the annual Convention. A vote was taken, and it was decided in favor of Dayton.

The Convention proceeded, after adjournment, to the Cincinnati Hospital, upon invitation of the Board of Directors of that institution.

They were cordially welcomed by the Superintendent and members of the medical staff, and at once escorted through the mammoth building. Many lingered in the surgical wards, and had a fair opportunity to improve their knowledge of medical matters by examining into the cases of many of the patients.

About one hour was thus spent, and then the one hundred and fifty or more delegates to the Convention were entertained in one of the most spacious rooms in the second story, with chemical experiments and microscopic views.

The first thing in order in the afternoon session was the reading of a paper on hydro-chloral, by Dr. D. D. Bramble, of Cincinnati.

On motion, the paper was accepted and referred to the Committee on Publication, with orders to print.

Drs. Herrick and Gundry were appointed to wait on the President elect and conduct him to the chair.

Dr. Dawson was duly inducted and with a few words of thanks for the honor of election announced that the business of the society would proceed.

Dr. Reamy, the retiring President, in conformity with custom, delivered an address reviewing the history of the Society during his presidency.

The next thing in order was the reading of a paper on Diseases of the Eye by Dr. Seely, of Cincinnati.

On motion, Dr. Seely's paper was received and referred to the Committee on Publication.

The Secretary announced that Drs. J. M. Hall, of Brown County, Haldt, of Cincinnati, and W. M. Logan, were duly vouched for membership.

Dr. Wirth, of Columbus, read a paper on diseases of the larynx, which was brief and to the point. The paper extolled the laryngoscope, and discussed the various methods of treatment for diseases of the throat intelligently, clearly, and satisfactorily.

On motion, Dr. Wirth's paper was received and ordered to be printed.

Dr. McIlvaine, delegate to the State Society of New York, read a paper detailing his visit, and his satisfaction with the proceedings of that Society.

The Secretary read a communication from the associate delegate, to the same effect, and, on motion, both were received.

Dr. McIlvaine announced the fact of his removal to a distant State, and gave it as a cause for his resignation as a member of the Society, which he therewith tendered.

On motion, the resignation was accepted.

Also, on motion, Dr. McIlvaine was unanimously elected an honorary member of the Society, for which mark of honor and distinction he gracefully returned his thanks.

THIRD DAY.

Dr. Kinkaid moved to reconsider the vote, fixing upon Dayton as the place to hold the next annual meeting, giving as his reason that none of the profession of that city were present, and it was thought that they did not wish to have the visit of the society inflicted upon them.

The motion was carried, and Portsmouth, whose citizens, it is said, were anxious to have the Society meet there, was substituted in its stead.

The first paper read was by Dr. Bartholow, on the use of the Ophthalmoscope and the Sphygmograph in the study of the physiological action of medicine.

Professor J. T. Whittaker, of the Cincinnati Medical College, next read a paper on Experiments in Reproduction, which was listened to with attention by all who were present.

The President announced that he had made the following appointments for the meeting next year:

On Uterine Therapeutics—Dr. H. J. Herrick.

On Surgery of the Eye and Ear—Dr. W. W. Seely.

On Therapeutics of Mineral Springs—Dr. George E. Walton.

On Generation—Dr. J. T. Whittaker.

On Pathology of the Blood—Dr. W. P. Thornton.

On Therapeutics of Electricity—Dr. R. Bartholow.

On Gynecology—Dr. C. D. Palmer.

On Chronic Diseases of Surgery—Dr. William Carson.

On Obstetric Records—Dr. J. Helmie.

On Electrolysm—Dr. W. H. Mussey.

On Cholera Infanta—Dr. A. J. Miles.

On the Use of Belladonna—Dr. J. S. Little.

On Diseases of the Larynx—Dr. R. Wirth.

On Hernia Cerebri—Dr. P. S. Connor.

On Diseases of the Skin—Dr. C. O. Wright.

On Castration—Dr. W. C. Hale.

On Medical Chemistry—Dr. J. B. Hoyle.

Consideration of Dr. E. B. Stevens' paper on Uterine Catarrh was taken up, and addresses were made by Drs. Dunlap and Wright.

Book Notices.

DR. DOBELL'S REPORTS ON THE PROGRESS OF PRACTICAL AND SCIENTIFIC MEDICINE IN DIFFERENT PARTS OF THE WORLD: Contributed by numerous and distinguished coadjutors. Vol. II. for the year 1870 (from June, 1869, to June, 1870). London: Longmans, Green, Reeder, and Dyer. 1871, 8vo. pp. 606.

About a year ago we noticed the first volume of this work, and it affords us much pleasure to announce the reception of the second. So

meritorious a publication should meet with large success, and we are happy of the evidence that it is being accorded to it.

The present volume contains reports of the progress of medicine, contributed by distinguished residents, in Great Britain, France, Germany, Italy, Turkey, United States, Australia, Ireland, etc. It is a sort of mirror, in which the physician is able see the progress of medicine wherever cultivated, and every practitioner should have a copy of it. By it one has the benefit of the experience not only of the profession of his own land, but of that of far distant countries.

The Reports of this volume are much better than those of the first. In making up our medical gleanings for this month we have made some two or three extracts from them.

INSANITY AND ITS TREATMENT: Lectures on the treatment, medical and legal, of insane patients. By G. FIELDING BLANDFORD, M. D. Oxon. With a summary of the laws in force in the United States on the confinement of the insane. By ISAAC RAY, M. D. Philadelphia: H. C. Lea. Cincinnati: Robert Clark & Co. 1871, 8vo. pp. 471.

These lectures, in an abridged form, were delivered by the author at the School of St. George's Hospital, and he now publishes them, with the hope that they may serve, to some extent, as a hand-book concerning insanity, on which subject there exists, in our language, few works of the character of a text-book.

We think both practitioners and student will find that this work will supply a desideratum long felt. We are glad of its appearance, for it will tend to diffuse a knowledge of insanity, of which only a few know but little about, and yet every physician is liable at any time to be called upon to give testimony in medico-legal cases involving it. While the subject is not treated in a prolix manner, yet there is sufficient fullness of detail to give the student a very thorough knowledge.

There are twenty Lectures. The first is introductory, and embraces a number of interesting topics. The second, third and fourth lectures treat of the pathology of insanity, and are very valuable additions to the literature of the subject. Lectures vi, vii, viii and ix are devoted to the causes and symptoms of insanity. The remaining lectures are devoted to the consideration of the different forms of insanity, melancholia, mania, etc. and treatment. General paralysis of the insane is fully considered and are highly interesting.

MODERN THERAPEUTICS. A Compendium of Recent Formulæ and Specific Therapeutical Directions. By GEO. H. NAPHEYS, A. M. M. D. Philadelphia: S. W. Butler, 155 S. Seventh Street. 12mo. pp. 412.

The first edition of this work—a very large one—was exhausted in eight months, showing that it has been greatly popular. It contains not merely "recent formulæ," but "specific therapeutical directions" and, to some extent, the philosophy thereof, in the management of disease. All previous collections of therapeutical facts have been arranged with reference to the articles of the *materia medica*, but here they are arranged on the nosological plan, which is the most convenient. You look under the head of the disease for the prescriptions usually made use of in its treatment.

We can recommend it as the best book we know of to learn elegant prescription-making; and the physician who is not an adept in this will be hindered very much in putting his knowledge of therapeutics into practice.

SURGICAL MEMOIRS OF THE WAR OF THE REBELLION, collected and published by the United States Sanitary Commission. **PART I.** Analysis of Four Hundred and Thirty-nine recorded Amputations in the contiguity of the Lower Extremities. By **STEPHEN SMITH, M. D.** **PART II.**—Investigations upon the Nature, Causes and Treatment of Hospital Gangrene, as it prevailed in the Confederate Armies, 1861-1865. By **JOSEPH JONES, M. D.**, Professor of Chemistry in the Medical Department of the University of Louisiana, New Orleans, formerly Surgeon in the Provisional Army of the Confederate States. Edited by Professor **FRANK HASTINGS HAMILTON.** New York: Hurd & Houghton. Cincinnati: R. Clarke & Co. Svo. pp. 580. 1871.

This work comes to us as another installment from the hands of the Sanitary Commission, which, now that its work of administering to the sick and wounded in the field and hospital has ceased, has again taken up, and continues to carry out the dictates of a true humanity, by collecting the results of the hygienic, medical and surgical experience of the war; and is industriously arranging and illustrating the causes, effects, and the result of treatment of the diseases and wounds that maimed and destroyed so many on both sides engaged in the great civil contest. By labors like these a more comprehensive and enlightened mode of action will be supplied for those who may be so unfortunate as to be thus exposed hereafter.

Part I. of this book, by Dr. Stephen Smith, gives the analysis of 438 cases of amputations of the lower extremities that have recovered, and have applied for artificial limbs at one of the principal depots from which they are furnished by the government. There is here supplied a large amount of useful information as to the frequency of the parts of the limb wounded and the operations which appear to have been the most successful in saving life, and supplying a useful stump for the adoption of artificial limbs. It gives tables illustrating the results of operations, and the comparative frequency of wounds upon the various portions of the limb, and compares them with the statistics of other wars in which similar operation were performed for wounds produced by the same kind of weapons and missiles. It also contains much that is interesting in the problem that is now being discussed as to the propriety and success of the various forms of treatment in gun-shot fracture; the feasibility of amputation, excision; the conservative measures employed in the various regions injured—all of which will be perused with great interest by all practical surgeons.

Part II. is a very complete and exhaustive contribution upon the history and characteristics of gangrene as it appeared in the hospitals of the Confederate army and the great prison hospitals at Andersonville, and other places in the insurgent States. Dr. Joseph Jones was especially detailed to investigate and report upon the nature and effects of this fearful scourge by the Confederate authorities, and that he was eminently fitted for such a duty this paper abundantly proves. It details all of our former knowledge upon this subject, and the opinion of those who heretofore have had experience, or had investigated the subject; and very lucidly compares the manifestations and treatment of the diseases thus narrated with what he saw in the field of observation assigned him. It presents the subject elaborated by all the aids of recent investigation. Dr. Jones seems happily adapted to the work. Being a practical chemist has enabled him to present numerous analyses of the urine in all the various stages of the disease, which gives the subject great interest. He also has very carefully marked the temperature, the frequency of the circulation and respiration, and given the results of numerous and minutely performed autopsies of fatal cases. Besides adding much to our exact knowledge, his conclusions and

generalizations are intelligent and practical in all their bearings. The origin of the disease, with regard to locality, hygienic influences, the mental and physical condition of those afflicted has been carefully noted, and shows that at Andersonville, where the prisoners were crowded in an inclosure, without any protection from the sun, during midsummer, illy fed, and morally depressed, the slightest wounds were followed by slough and gangrene, and that those whose duty it was to guard the camp, often were in a like manner attacked when but slightly injured. It is also very conclusively shown that the depressing effects predispose to the disease, which, when once established, appears only to act locally, but after it has extended, and the secretions of the local manifestation has become absorbed, then the constitution is affected, and is often followed by pyæmia, phlebitis, chronic diarrhea, and typhoid symptoms, destroying the patient. In the treatment, the effects of proper surroundings and diet, with a complete removal of the gangrenous parts, and the thorough application of nitric acid and other strong escharotics, will in most cases completely stay and control the disease, if had recourse to before the constitution has become too much depressed—thus confirming by the surgeon of the Confederate side what was considered established by the Federals in their practice as an incontrovertible fact, and is the brightest surgical triumph of the war. This part of the volume is illustrated by several well executed chromo-lithographs, showing the character of gangrene in its various stages, its effects upon the vessels, and its microscopic appearances. The whole work is gotten up in the best style of the house from which it is published, and in a manner worthy of its contents. D. S. Y.

Editorial.

NOTICE.—We will be obliged to our subscribers who have not yet paid their subscriptions for 1871, to forward them, and thus save us the trouble of sending them bills, which we shall soon do if we do not hear from them. We are sorry to say that a number are behind for 1870—not sorry on our account, but on theirs, for they have transgressed a moral obligation and taken away from their integrity, thereby suffering loss in that which in value is above all things.

SCANDAL.—A number of persons seem to have their righteous souls vexed on account of some of our editorials. Well, we are exceedingly sorry to offend any one, but we have a duty to perform which must be discharged, whether our sensitive friends have their feelings harrowed or not. "The beasts at Ephesus" have taken up their

abode in Cincinnati and must be fought, or some of the most vital professional interests of this city will perish. Peace is greatly to be admired, but we can not sacrifice right to it. We would feel that we deserved the anathemas of all good men if we did.

But the epithet of "disturber of the peace" is a very old and stale one, and we think it is about time that those who suffer deserved chastisement for their sins, should, in the way of variety, find some other missile to hurl at those who are engaged in the laudable duty of circumventing them in their wickedness. There never was a reformer from the beginning of the world to the present time, who did not have the howl raised against him that he was an exciter of turmoil and dissension. Even Christ was not exempt; it was a common accusation against Him that he

"stirred up sedition," and it was on this charge that the Roman governor sentenced Him to death. And for many hundred years previous there is evidence that the charge of disturbing the peace, brought against those who exposed knaves in their fraud and hypocrisy, had become antiquated. So that we think some new tact should be taken by those who have the dread of exposure before them.

"Woe unto you when all men speak well of you." There is no better proof that a man is destitute of set principles than the fact that he never comes in collision with any one. Men's passions and self-interests cause them, even the best of them (and they are very few), to swerve from the right, and he who has no occasion to give offence by rebuking or standing in the way of others, is because he either has not sufficient intelligence to discriminate between right and wrong, or, having it, he is without moral feeling. When an individual has no enemies he should greatly suspect himself of being a time-server—that he compromises right with wrong—that he is without individuality, or any of the elements that contribute to make the man.

We are aware that the morals of the day are largely of the movable sort.—that they are from day to day according as to "what will pay"—that as a writer in the *Pall Mall Gazette* says, all that we have learned about righteousness for righteousness' sake, about abstract virtue, self-respect, and the thing which is good in the sight of God and our own souls before all else, is simple moonshine, so far as its translation into active life is concerned; yet we have a monitor within us testifying that any such movable code of morals is a deception, and is in conflict with the one given to us by Nature, which is immovable in its great principles, remaining the same at all times and under all circumstances, and that it is our duty to stand up to the promptings of this latter, smiting hip and thigh all who transgress it, even if it be to our own

hurt. Although it may seem difficult to teach men that patriotism, self-sacrifice, persistent endeavor against heavy odds, truth and simplicity are qualities to be admired, when they will probably find themselves ruined if they put them into practice, yet "the heroes and patriots of old, those men of far-off history who organized a hopeless resistance against an impregnable despotism, and died gallantly in the attempt, are quoted for admiration, and the after-advantages of what was at the time a foredoomed endeavor are elaborately proved," showing that there are in the heart recognized principles of right which only require the selfish passions to be held in abeyance to shine forth.

If scandal is standing up unflinchingly for the right in opposition to those who are laboring for dishonorable ends, we think if there were very much more of it than there is it would be better. Bad men would then not have so easy a time of it; for exposure would soon follow upon their wrong-doings. If an individual is as sensitive in regard to what is not right as he should be, he will stand in no great dread of scandal, for he knows full well that without a cause to sustain it it will soon destroy itself. The pretended cry of dread which some men get up in regard to it is a device of the Devil, which is only effectual with weak-minded persons, but has no effect with those of sense and principles. A certain writer truly says: "*There is no surer sign of rottenness in any sect, body, or organization, than the appearance of greater horror over the making of an accusation than over the commission of the offence. As soon as we see 'scandal' become the greatest dread of a community, we may be sure that its morals are becoming muddled at its source.*"

When the MEDICAL REPERTORY was commenced in 1868, the Cincinnati Hospital was almost entirely in the control of a miserable clique, who conducted themselves very much as if it were their private property, although, so far as they were concerned, if it had not

been for Dr. R. R. McIlvaine and the Hon. W. M. Corry, the lot on which it stands would have been sold several years ago, and the old, rickety Commercial Hospital still in use. No one not a member of the clique, or indorsed by it, had a ghost of a chance of obtaining a position on the staff; and any one holding a place who, at any time, exhibited any independence, was ignominiously discharged, as, for instance, Drs. Tate, Carroll, Graham, Wood, etc. At the time, the Cincinnati College of Medicine and Surgery had not a single member of its Faculty on the staff, and the Ohio Medical College only a few, and the Miamis were having them deposed as rapidly as they seemed to stand in their way. Thoroughly organized and disciplined they wielded a great power, and, as it increased, in a geometric ratio did their arrogance. The only medical journal published in this city was their organ, and it was engaged in monthly spreading forth their praises, and suppressing everything that would be to their discredit, or to the credit of any one else. So far did the *Lancet & Observer* carry its suppressions when it was the only medical journal of the city, that even in publishing the discussions of the Academy of Medicine, while it would publish in full the remarks of some Miami man, not unfrequently permitting him to first rewrite them, it would oftentimes not devote more than two or three lines to the remarks of other gentlemen, far more able and intelligent, not of the clique. Indeed, subscribers had good reason to suppose from its pages that the Miamis composed the *profession* of Cincinnati.

But how was it with the colleges at the time we speak of? The Cincinnati College of Medicine and Surgery, which was more particularly the object of spite, was traduced on all occasions. Medical students were sometimes told that it was not a regular school—that a course of Lectures in it would not be recognized by other schools; at other times the Miamis would graduate a student who had attended

but one course of Lectures at the Cincinnati College of Medicine and Surgery, and not a single lecture at their own college, in order that they might claim him as a graduate. Their organ, too, was engaged in the *honorable* enterprise of suppressing all information in regard to the Cincinnati College, except what was paid for in the advertising form. Pretending to be an independent journal devoted to no school, while it would devote pages in detailing the Commencement Exercises, etc., of the Miami College, it would either pass by the Cincinnati College unnoticed, or give it not more than two or three lines, in which it usually misstated the number of students, graduates, etc.; and this, too, notwithstanding the members of the Faculty were paying subscribers, and the College advertised in it largely.

But, to be brief. How is it with professional matters in Cincinnati now? Do the Miami clique control everything since the *REPERTORY* has been on the tapis? We can assure our readers they do not. Notwithstanding the howl they have raised against us, their influence has been on the wane. Several of them have been compelled to resign their positions on the hospital staff, and not one from their number has been appointed to fill the vacancies; and we have assurances from high authority that their *valuable* services will be dispensed with as rapidly as possible. About three years ago the Trustees of the Cincinnati College petitioned the then directors of the hospital that their college might have a representation on the hospital staff with the other colleges, but their presumption excited so much contempt that the directors could never find language to reply; but within a short time one of the faculty has received an appointment, and there are strong hopes that fuller justice will be rendered if the friends of the school do not become wearied or frightened out in well-doing by the cry that they are exciting *scandal*.

It is painful at any time to have the harmony of a community, or organization, or profession of any

kind, disturbed, but they are the real disturbers who are guilty of outrage and injustice, not those who cry out against it. Though disorder and bloodshed and distress follow on a nation's revolting against the tyrants that oppress it, yet a people that will bear oppression for the sake of peace deserve to be slaves, and deserve the contempt of the whole world. If the profession of Cincinnati would quietly submit to be tyrannized over by a miserable clique of men, powerful in being thoroughly banded together, while no organization exists outside their ranks—without ability, but shrewd and cunning—they would certainly only merit to be despised. But they do not propose anything of the kind; they propose that the best men shall occupy the highest positions of honor and trust, and that the colleges shall have the opportunity of competing with one another on an equal footing. They have already dallied too long for the sake of peace, and so have the colleges. Why, before the REPERTORY was commenced, on account of the maligning of its enemies, its being sedulously excluded from the general advantages of the city, and inability to communicate with the profession, the Cincinnati College of Medicine and Surgery became almost destitute of students, but now more students are in attendance upon its Lectures in a year than those of any other regular college of the city, and the number is increasing every session. No wonder that the Miami clique and their hangers on cry out against us. Our crusade against the unrighteous tells against them fearfully.

We dislike very much to offend our weak friends, who, in their desire for peace, would unwittingly let wrong prevail, but it has devolved upon us to "cry against" the evils that exist in the profession of this city, and we must do it. If we did not, like Jonah, we would be swallowed up. It is not a task of our own seeking—we tried hard to be rid of it, and would, even now, quit it if there was a way by

which we could escape and keep a clear conscience. Probably there is no city in the United States where such grievous abuses exist as in Cincinnati—where merit in so marked a manner, counts for nothing, and partizan associations outweigh everything. If a Hippocrates, Galen, John Hunter, or Astley Cooper, were in this city, and did not make himself a tool of a dirty clique, he would receive no more attention than the meanest quacks; and instead of the positions being opened to him in which his eminent abilities would be of the greatest service, and could be cultivated to the largest extent, there would be found occupying them the merest shams. There has just been appointed on the staff of the Hospital a young man as pathologist but a few months a graduate, who, in the limited time he has had for study, necessarily can be but imperfectly acquainted with the physiological structure of the tissues, and therefore can know little or nothing in regard to the pathology of them. But, forsooth his clique associations are all right, and he is said to have wealthy family connections, and what matters scientific qualifications alongside of these? What matters it if Drs. Miles, Mackenzie, and a number of other gentlemen have been spending some years in pathological investigations, and would be glad of the place for the increased facilities it would afford them for study? it would be absurd to suppose that knowledge would count anything against family connections. And of course it is supposed that the students who attend the clinical lectures of the hospital will accept the family connections of the lecturer in place of knowledge. The Board of Directors are making rapid strides towards making Cincinnati a great centre of medical education.

We do not propose to reform all the abuses of the profession of Cincinnati—for we would regard the contract as too large for us—but we propose to proceed with our "scandal" until at least some of the greatest of the abuses cease to

exist, viz., until the management of the Cincinnati Hospital is redeemed from clique influences, and all the medical colleges are on an equal footing as to the advantages it affords, either by their all having an equal representation on the staff, or all are put off. When this is done we will regard our work as finished, and we will turn the task of other reforms over to some one else.

CHANGES IN THE HOSPITAL STAFF.

--Since our last issue some changes have taken place in the staff of the Cincinnati Hospital. Drs. Blackman, White and Mendenhall have resigned their active duties, and been made consulting physicians. Dr. Taylor has been transferred from pathology to obstetrics; Dr. Carson from pathology to medicine; Dr. D. S. Young, of the Cincinnati College of Medicine and Surgery, has been appointed to the position of surgery, made vacant by the resignation of Dr. Blackman; Dr. Gobrecht, and Dr. Dandridge, jr., have been made pathologists.

THE STATE MEDICAL SOCIETIES.

--The Ohio State Medical Society and the Kentucky State Medical Society met, the one in Cincinnati and the other in Covington, Ky., April 4th, 5th, and 6th. The attendance of members upon the meetings of each society was good, and everything passed off most harmoniously and agreeably. There were many papers read, a number of which were regarded able and interesting. On Tuesday and Wednesday evenings banquets were held, in which both societies participated--the first in Cincinnati, at Hopkin's Hall, and the other in Covington, at the Odd Fellows' Hall.

The Ohio Society adjourned to meet at Portsmouth, O. next year, and the Kentucky Society at Louisville, Ky.

AMERICAN MEDICAL ASSOCIATION.--By the *Union and Pacific Railroad*, Omaha to San Francisco and return, \$125. Tickets good for

60 days, and sold *only* to holders of certificate from permanent secretary. This includes wives and families of *all* who desire to participate in the excursion.

At Cincinnati, Louisville and Nashville, there are arrangements for the round trip. Local arrangements have been made with other roads; hence application should be made at starting for *excursion* tickets.

Time, Omaha to San Francisco nearly four days; Chicago to Omaha, 22 hours.

Meals at convenient points all good, 75 cents to \$1.

Sleeping Cars, each double berth Omaha to San Francisco, \$14.

Those desiring certificates should apply immediately, *with stamp*, to Dr. W. B. Atkinson, Philadelphia.

DIVIDED MEDICINES.--We desire to call the attention of our readers to the advertisement of Mr. Frederick Kraus. His mode of preparing medicines must revolutionize the old method of dispensing. By means of a gelatinous preparation as a vehicle, the dose of any remedy is contained in a little square, which he prepares sheets of a hundred or more in each--a square clipped off, floated on a spoonful of water, and given. Perfect accuracy is secured in quantity, there being no guessing. If we were a country physician we would throw away our inconvenient pill bags, and dispense our medicines by this more convenient, and elegant method. Nearly the whole pharmacopoeia can be carried in the side pocket.

PAMPHLETS RECEIVED.--Color Blindness, and its acquisition through the abuse of Alcohol and Tobacco. By Richard H. Derr, M. D.

The Raising and Education of Abandoned Children in Europe, with statistics and general remarks on that subject. By Abraham Jacobi, M. D., N. Y.

Report of the Southern Ohio Lunatic Asylum.

This has been mislaid, or would give some of its statistics.

THE CINCINNATI MEDICAL REPERTORY.

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No. 6

SMALL POX IN CINCINNATI IN 1868-69-70.

By J. A. WALKER, M. D., Cincinnati, O.

The epidemic of small pox of 1868, 1869, and 1870, will long be remembered as of greater severity and extent than has ever before visited Cincinnati. Nearly or quite one thousand of our population have been swept away by the touch of this fearful disease, and as many more disfigured for life, some to an extent worse even than death itself.

Why these periodical visitations of epidemics has not yet been settled. Theory asserts that they follow great convulsions in nature, as earthquakes, volcanoes, tidal waves, etc. True it is that the recent epidemic of small pox, so universally diffused throughout the world, was preceded by these great upheavings.

Dr. Logan, of Sacramento, California, has written a very able paper on this subject, which is well worth reading. May not the cause, however, be found in accumulated material, unprotected either by vaccination, or by a previous attack of variola? Years pass—vaccination is neglected. Under these circumstances small pox is introduced; a poisoned atmosphere results in the locality, and the air becomes loaded with the germs of variola. Of one principle there can be no doubt, that when proper energy is used during these seasons to “stamp out” the disease in its beginning, there is no extension of the contagion.

In making up this report I find, unfortunately, that there are no official statistics of numerical extent, or comparative mortality of the vaccinated and unprotected. This is a source of regret, as the important questions arising from vaccination are

before the profession for re-discussion, not only in this country but in Europe. It is to be hoped, before we have another visitation, some plan will be devised not only to give the number of deaths, but the number of cases occurring.

The Health Officer in his report for the year ending Feb. 25, 1869, gives important information as to locality of deaths, age of decedents, and nationality. Also extracts from reports of city physicians as to the protective power of vaccine. Extracts from these will be used in this report. The first case of small pox resulting fatally was reported in January, 1868, from the sixteenth ward. Three deaths were reported this month, and I believe, from this locality. In February there were eight reported for burial. No means are at hand to make it positive that they were all from the sixteenth ward, but the report for the next month renders it almost certain that they were.

This ward, as you all know is in the south-west portion of the city, on Mill Creek, and is largely exposed by railroad and river travel, and favorably situated for the extension of contagion. It seems remarkable that, after three months' sojourn, we have the eleven deaths in March eight in this same sixteenth ward and only one each in wards 11th, 14th, and 18th, they being contiguous by locality, or connected socially. This, however, is not a universal law of small pox contagion. It does not approach the whirlwind, but more like the cautious enemy carefully entrenching itself for its work of destruction. It always gets ample time to hedge up its advances, and to "stamp it out" of its entrenchments; and the proper authorities, failing to accomplish this, make known their incompetency for the trust committed to them. In April the sixteenth ward again yields eight to the list of mortality, and the messenger of death reports from other wards, viz.: Ward 1, one; ward 4, two; ward 5, one; ward 6, one; ward 7, one; ward 8, three; ward 11, two; ward 12, two; ward 15, one; and ward 18, one—whole number 24, one-third being from the ward of commencement. The other wards, it will be observed, are adjoining or connected by means of travel and socially. The disease gradually extended, diminishing somewhat, as is usual during the dry summer months, so that, in the following December, there were deaths in all wards, the twentieth alone exempt, it being furthest from the point of introduction. In January, 1869, there were deaths

all the wards except the second and twentieth, and in February, in all but the Fifth.

Whole number of deaths in wards this year.....	599
Pest House.	45

Total.....	644
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The greatest mortality for the year was in the months of December, January and February—an average of 145 per month, or nearly five per day. It will be noticed in the course of this epidemic that its greatest severity has been in damp, wintry weather, becoming less active during the dry months of the year. This is the usual history of small pox when left to itself.

The following, from the Health Officer's Report, we give in full, as it is of general interest:

"The greatest mortality from any one disease was from small pox. The number of deaths from this disease was 644. Of this number 511 occurred during November, December, January and February; and the greatest number was in the twelfth ward, viz., 17.86 per cent. on the whole number of deaths from small pox. By reference to table on page 36 (of Report), it will be seen that 66 per cent. of deaths from this disease were in the 8th, 9th, 10th, 11th, 12th, 18th and 19th wards." I would here call the attention of the Academy to the fact that in these wards the German element predominates, and we plainly see the result of those pernicious influences instilled into the minds of our German population in opposition to vaccination by some of the German physicians: it has been to leave the fair forms of childhood to disfiguration and death.

The report continues: "Of the decedents 353 were males and 291 females. *Four hundred and three* were less than five years of age, and five hundred and three less than twenty. The remainder were of different ages, ranging from twenty to eighty years. One hundred and forty-five were under one year of age." It will be seen by these figures that 403 of the deaths were of children under five years, and would all have been certainly protected by successful vaccination, as we have no recorded case of death from post vaccinal disease prior to the age of five.

These may all be placed in the list of victims of neglect. Sixty-two and one half per cent. therefore, of this fearful mortality has been an unnecessary and cruel "slaughter of the innocents." It is to be regretted that we have no statement of the

number under fifteen, as a death from small pox after vaccination is almost unknown in statistics prior to this age.

We have received several interesting reports from different members of the Academy of incidents connected with the recent epidemic. I give two as examples. B. Mosenmeier, M. D., gives the following list treated by him during the years 1868-9.

Whole number of cases.....	115
Confluent.....	23
Discreet.....	43
Varioloid.....	50-115
Not vaccinated.....	53
Vaccinated.....	62-115
Deaths of vaccinated.....	1
" " not vaccinated.....	25
Total Deaths.....	26

Of deaths—youngest two months, and eldest fourteen years. Average age of decedents two years and fourteen days. Of the convalescents the youngest was four months, the eldest sixty two years. Average age thirteen years. Of those said to have been vaccinated, seven had "variola confluens," and all recovered. Of the sixteen never vaccinated who had the confluent form, thirteen died, or one in 1.2, a very decided difference in favor of vaccine influence.

It is well known that Dr. M. served in the thickest of the fight, and it is clearly demonstrated by his large number of confluent cases, and the low average age of his deaths, it being two years and fourteen days—the eldest being only fourteen years. Of his post vaccinal cases, sixty-two in number, there is but one death, while, in his unprotected, it is one in 2.3.

Dr. P. H. Bigney reports whole number treated 109.

Not vaccinated.....	76
Vaccinated.....	33

Whole number of deaths, 13.

Of vaccinated.....	2
Of unvaccinated.....	11

The percentage of mortality is of the unvaccinated, 14.5, while of the vaccinated, it is only 6 per cent.

The doctor remarks that of the vaccinated 25 had varioloid and eight had variola, all of whom had reached the age of manhood or womanhood, and had never been revaccinated. Two of this number died. In order to make an estimate of the number of cases and comparative mortality for the year 1868-9, I

have taken for a basis 299 cases reported by different members of this Academy. These reports embrace all parts of the city, and give a fair average of the whole. Of the 299 we have unvaccinated 129, with 36 deaths—one in a fraction over $3\frac{1}{2}$, or about 28 per cent. One hundred and seventy were reported vaccinated, with five deaths—one in 34 , or a fraction less than three per cent. Taking the whole number of deaths for the year, 644, on this basis, we have total number of cases 4696.

Vaccinated.....	2670	
Deaths of post-vaccinal ..		78
Not vaccinated ..	2026	
Deaths of unprotected.....		566
Total number of deaths.....		644

It will be seen, therefore, that of those not vaccinated four hundred and sixty-six died in 2026, while only seventy-eight in 2670 died of those who were reported vaccinated. The whole mortality is one in 7.2 or 13.8 per cent. This shows a large mortality, but when it is considered that four hundred and three were under five years, and one hundred and forty-five less than one year—that the whole city was breathing an atmosphere of contagion, we may wonder that it was not greater.

Dr Elisha Harris, of New York, reports of small-pox in that city in 1864-5, that in upwards of 2000 cases there were more than 600 deaths. Some epidemics have been reported as high as 60 per cent. The average mortality, as given by our best authorities, is, for the unvaccinated, 25 per cent, and the vaccinated, 5 per cent, or, as has been well stated by one: "A man has about six times more chance for his life if he takes the disease after having been vaccinated." The regular progress of the disease from the beginning is shown by the following table, commencing with January, 1868—two months previous to the commencement of our Board of Health Report:

1868.		1869.	
January.....	3	January.....	146
February.....	8	February.....	147
March.....	13	March.....	77
April.....	25	April.....	45
May.....	17	May.....	29
June.....	7	June.....	19
July.....	17	July ..	10
August.....	10	August.....	9
September.....	18		
October.....	32		
November.....	76		
December.....	144		

By comparing these tables with those of Cardiff (town) and Sheffield, given by "Seaton," page 319, we shall be able to discover the fact, that the epidemic has here made good its history of destruction. Always entrenching itself, and, by gradual approaches, enters upon its work of death, and when once in possession keeps good its grasp, if let alone, till there is no more material on which to operate, then gradually retires. By the foregoing table for the six months, ending Aug. 31, 1869, there were 179 deaths, which, added to the 644, would make a total of deaths from small-pox in 18 months, 823, giving, in accordance with the estimate a little over 6000 cases in one year and a half. There was a slight increase in the number of deaths after August, leading us to fear a still further development, but the indications now are that the material is about exhausted, and that we shall not have a repetition of epidemic small-pox under eight or ten years, and if vaccination could be universal, we might well expect never to receive its attention again. The necessity of vaccination and revaccination, and the protective power of vaccinia has been fully presented in the beginning of the year 1869, and nothing occurring in this epidemic has diminished our confidence. In reference to the question of the protective power of vaccinia, I would repeat the words of Dr. Alcock, written in 1820-21, and often repeated: "You will remember that the question is, not how many vaccinated persons take small-pox, but how many vaccinated persons are fully exposed to the contagion of small-pox, and escape without any disease, and our assertion is, that, as far as is yet known, absolute protection of the human constitution is the rule, and the occurrence of any disease is the exception."—(Seaton, page 235.) Has not this been verified in the recent epidemic? I think it safe to suppose that our whole population was exposed to variolus poison during the past two years. It was generally diffused throughout the city. Not only diffused, but so intensified that the air which we breathed was laden with this specific poison. No portion of the city was exempt. If we take the population as reported by the health officer we have 260,000 exposed to the disease. I think, if we should state that 200,000 had been protected against 3000 failures, we should not exceed the bounds of prudence. The great number of physicians and nurses, who have no protection other than vaccinia, stands a proud monument to the fame of Jenner.

The question is often asked, why small-pox, a disease professedly under our control, should have been permitted to exist in this city, apparently unchecked, only by exhaustion, for more than two years? The Health Officer in his report on pages 38 and 39, after giving the "means employed to prevent small-pox from spreading in the city"—says: "But they were rendered only partially successful, owing to two circumstances: viz., 1st, Many physicians did not comply with the law: that is, they did not report their cases to the Health Officer, as the law required. 2nd, A number of German physicians, of influence and respectability in the city, positively discountenance the practice of vaccination as a preventive of small-pox, and entertain and promulgate the opinion that it is a medium for communicating other diseases to the human system." These may be considered by the board great obstacles, but I would ask what efforts were made to remove them? A few newspaper notices—a few circulars—a few good resolutions—none of which would be likely to fall into the hands of the masses—*notices to the ward physicians to vaccinate gratuitously all the poor that call on them without extra remuneration*, is about the substance of these efforts to carry into effect the *efficient* measures proposed. It has been stated that small-pox "enjoyed the freedom of the city for two years."

Is not this true? Has it not been met on the streets—in the hospital wagon—in the gentleman's hack—in the saloons—in places of amusement? And we have in the Health Officer's report for October, 1869, that it has been welcomed to our churches, attended by societies—members of which unvaccinated have taken the disease and died.

We would call attention to the following report of the officer, for October, 1869, after the disease had existed in the city for nineteen months:

"You will observe that there were nineteen deaths from small-pox during the month past, a number of whom were adults who had never been vaccinated. In three instances the funerals of small-pox cases were attended by societies; the bodies of two of the decedents were kept in the house over forty-eight hours; three of the members of the societies referred to contracted the disease and died. There are many instances in which the small-pox has been contracted and spread by keeping the bodies an unusual length of time and then giving them a

public burial with the attendance of societies. It is well known to physicians that this is one of the most certain ways of communicating and disseminating the small-pox. I would therefore recommend that the bodies of persons deceased of small-pox should not be taken into churches, and that all societies should discontinue the practice of attending funerals.

"It is highly important that the public generally, as well as physicians, should understand the necessity of reporting to the Health Office, promptly, all cases of small-pox, and also *all cases of varioloid*. The objects which the Board of Health have in view in asking all persons having knowledge of the existence of small-pox or varioloid in any house or locality, is that prompt and proper means may be taken to prevent the disease from spreading, and that such persons as have the disease may be properly taken care of, and not be neglected.

"It is earnestly advised that all parents, or other persons having charge of children, have them properly vaccinated at once. And all children, as well as grown persons, who may have been vaccinated, should consult a physician as to whether they are sufficiently protected by such vaccination; and when the least doubt or uncertainty exists vaccination should be practiced at once. There are very many instances in which persons are required to be vaccinated repeatedly before complete protection is afforded against small-pox. Vaccination is the only preventive against small-pox.

"All persons who desire to be vaccinated, and who are not able to pay for such vaccination, can have such service gratuitously performed by calling upon the 'District physician' of the ward in which they reside, any day, between the hours of one and two o'clock P. M., or at such other hours as may be designated by the physician."

It was reported in the *Cincinnati Commercial* in connection with this report and recommendations, that one member of the board was not prepared to act, wishing to post himself, as he was not convinced that small-pox was a contagious disease. A non-Medical Board of Health *may* be good policy, but in this epidemic they have signally failed "*in rising to the magnitude of the occasion*" in meeting this emergency.

In this connection I would ask attention to an extract of a paper read before the American Social Science Convention, in 1869, by Dr. Elisha Harris, Sanitary Superintendent of the Metropolitan District, New York.

This extract and others are here presented as a contrast between the action of our Board of Health and other authorities, and also for the consideration of those who are asking for com-

pulsory laws for vaccination; which, to say the least, are considered by many as of doubtful expediency.

Dr. Harris says:

"Again, in dealing with contagious diseases, it is found that masses of the people yield cheerful compliance with whatever requirements and advice the sanitary authorities propose. For instance, cases that may not here be mentioned had recently planted small-pox in more than one hundred different places in the city, and distributed it all the way from the battery to Harlem and Carmansville, in such places and in such a manner as to insure its rapid and wide spread ravages. During the preceding two years there had been much idle clamor kept up by a few persons against vaccination, and in opposition to the concern of sanitary officers about this duty in schools and elsewhere. The danger had at last become imminent. Two hundred and twenty-five cases of small-pox had been discovered in the city between the first day of January and the last day of May. On the latter day a plan for systematic canvassing, by house-to-house visitation, throughout the entire city was put in operation, and by the liberal and unanimous vote of the Board of Health sixty physicians were added to the twenty already on duty as Sanitary Inspectors, and the whole force was concentrated upon the work of house-to-house vaccination.

"These gentlemen could use no coercive measures in the task they undertook; but they were charged to explain the duty of vaccination. This course unbarred all doors and broke down all opposition. They triumphed in the work, and thereby conferred a benefit upon the metropolis which saved many hundred lives, and protected its commercial interests against the loss of millions of dollars that would have resulted from the continued and increased ravages of this loathsome contagion. In the six weeks ending June 15, there had been no less than sixty-one cases of small-pox discovered and placed under sanitary care in the Sixteenth and Twentieth wards alone. The work of vaccination in these wards was completed July 10, and from that date until Oct. 10 only three cases of small pox were found in the Sixteenth and only four in the Twentieth Ward. These two wards contain not less than 150,000 people, mostly in tenement houses; and the persons who sickened of the disease during the period last named proved to be those who had not received the boon the board's vaccinating corps offered from house to house. As to what would have been the result of neglecting to offer vaccination in this manner, and to instruct the people in their duty concerning it, we may judge from the events of the winter of 1864-65 in our city, when upwards of two thousand cases of the disease and more than six hundred deaths occurred. Then there was panic and so great fear of the contagion that thou-

sands of merchants purchased in other cities who would otherwise have visited New York."

In 1854-5 small pox was spreading fearfully in the thirteenth ward of this city. A proposition was made to the Infirmary Board "to stamp out" the disease in three weeks if they would give the necessary assistance. To this they agreed. The mayor directed his day police to visit all the houses, and to see that every child of the poor not vaccinated was presented to the city physician for the operation. The policemen of this ward were faithful men. The result was, that in less than four weeks, three hundred had been vaccinated or revaccinated, and not a case of small pox remained. This month's work cost the city \$75, for they then allowed twenty-five cents for vaccination. The result justified the measure twenty fold. The epidemic was stayed, and the results continue to the present. In this large ward, so liable to contagion, only thirteen deaths occurred during the late epidemic, being only 2.17 per cent. of the whole number of deaths from small pox.

Dr. E. Snow, Superintendent of Health, Providence, Rhode Island, states, in his report for 1868-9, that small pox appeared in that city of fifty thousand inhabitants four different times during the winter, and in four different localities, all favorable to its extension, yet in no case did the disease extend beyond the infected tenements. He relied on vaccination and isolation. These agents failed *him* not, neither will they ever fail when vigilantly employed. Standing at a safe distance, proclaiming "peace when there is no peace"—issuing circulars to those who can not read—offering relief and publishing resolutions of the Board of Health in the city papers which never visit the abodes of the masses, will never conquer this enemy of the human race. It must be a hand-to-hand encounter and no surrender—the masses must be reached by house to house visitation and vaccination. It has been objected that isolation bears heavily on the isolated. Admit that it does for a time, the public good demands it, and what comparison can be made between a partial restraint of liberty for a few weeks and the loss by death of nearly one thousand of our population, and the incalculable loss to the business interests of a large city like ours during the past two years. Vaccination and isolation are our reliable agents, and when energetically applied remove the necessity for epidemics

of small pox. Far cheaper would it have been for this city to have placed in the field efficient vaccinators to canvass the different wards of the city from house to house, and paid them a fair compensation, than relying on the poor presenting themselves to the city physicians, thereby increasing the labor of these medical men, who, on an average, received during the year 1868-9 about three cents a visit. The answer to the question, Why this extended and disastrous epidemic? is a very plain one. Vaccination has been neglected by those having children in charge. It has been performed by those who did not know the difference between a common ulcer and a well developed vaccine postule. Physicians have been undoubtedly remiss in not knowing in each case that the well defined areola appears.

There is also too great neglect of revaccination. The utter want of efficiency on the part of our authorities in the use of the well known and only means for putting an end to the contagion is the great reason why small pox enjoyed the hospitalities of our city for more than two years. I will here state that our Health Officer has made some excellent recommendations, and the Board of Health has not failed to pass stringent resolutions; but it seems there has been a complete failure in enforcing or carrying into operation the following powers conferred on the Board: "May take measures and supply agents and afford *inducements and facilities for general and gratuitous vaccination.*" I have been furnished with many interesting facts in relation to the peculiar effects of vaccination in this city during the epidemic. These I hope to present to the Academy during the present year.

THE RELATIONS BETWEEN MORBID PHENOMENA AND ORGANIC STRUCTURES.

Post Mortem Examinations and their Lessons.

Report of Committee on New Remedies to the Muskingum County, O.
Medical Society, May 4. 1871.

By Z. C. McELROY, M. D., Zanesville, Ohio.

In obedience, without doubt, to the ordinary laws governing trade in such matters, a butcher of the Jewish religious faith commenced his business in our city during the past year. As a matter of scientific interest I visited his place of business early,

in the past month, explaining to him that my call was made to ascertain some particulars in regard to the Jewish mode of slaughtering animals for food. He received me courteously, and stated that the Jews were still governed by the Mosaic laws on the subject, and exhibited to me the implements used only in the act of slaughter—very neat and kept scrupulously clean, and in appropriate cases. The instruments for other purposes are such as are in common use by butchers. After an animal was clearly dead, he was required by the laws of his people to make a *post mortem* examination, to ascertain whether its flesh was suitable for human food. The first object of examination was the lungs, and, subsequently, the contents of the abdomen. He explained to me what was his duty, and what he actually did whenever any lesions of structure were found, all of which were interesting, but for my present purpose not necessary to repeat here.

Very soon after I received a medical journal, containing a history of what was called "A Remarkable Case of Hysteria," with the results of a *post mortem* examination. I certainly found the case interesting, and hope to make a summary of it, with its lessons, equally so to my fellows to-day.

The patient, a female, aged twenty-one at death, had had a long and serious illness, called typhoid fever, at fourteen years of age, succeeded by a protracted convalescence, winding up with pain in the side in the region of the liver. This was diagnosed as an abscess by the attending physician, who proposed an incision, which was declined, followed by his dismissal from the case, and the calling of another physician. Two years after an uncle of the patient finds her in Ohio, in charge of a Thompsonian, but not improving. This uncle takes her to a large city and places her in charge of a homœopath, who treated the girl two years for womb disease. Another change of physicians, and she was maintained in a sitting posture in bed, night and day, during a whole year, for womb disease still; otherwise treated mainly by so-called tonics and stimulants. The occasion of her being confined in the sitting posture so long was, it is explained, that her left leg was persistently drawn up, the heel pressing against the vulva. The leg could not be moved from this position only when she was under the influence of ether, when it could readily be extended; but with returning consciousness it was again retracted, and no amount of force could keep it

extended. Various mechanical contrivances, in the way of splints and bandages, were tried, but all were unsuccessful in keeping her limb extended.

Doctors again changed, and she becomes the patient of a mesmerist and clairvoyant, under whose management she thought she improved; but, as she did not get well, another change of residence and doctors, and she is brought before a medical college clinic. The examination here disclosed, the professor said, retroflexion of the uterus. The next day he proceeded to replace it, and, to maintain it in position, introduced a ring pessary. Suppositories of morphia and belladonna were introduced into her rectum, and hydrate of chloral given internally. The vaginal manipulations and pessary threw her into violent spasms, which continued all the time the instrument was worn in spite of the morphia and belladonna suppositories and chloral hydrate. At the end of six weeks the pessary was withdrawn. Severe pain in the region of the left ovary next led to the diagnosis of abscess by an attending physician, who applied a succession of blisters without any relief.

Another change of professional advisers brought her to a clairvoyant again, who confirmed the diagnosis of the last physician, but the clairvoyant could do nothing for her relief; thought if she lived long enough the matter would come away of itself, and then she would get well. But the spasms and suffering continued to increase until her death, which took place not long after.

In the treatment of the case it is stated all the anti-spasmodics, nervines and anodynes, known to the pharmacopœia, were employed unsuccessfully. On more than one occasion an ounce of chloral hydrate was administered in twenty-four hours without relief.

In the midst of all her sufferings her appetite continued good, even craving, until near the close of her life, when the circulation and respiration sensibly failed. She menstruated regularly but scantily, and had some slight leucorrhœa. At the post mortem a number of physicians were present. Body well nourished. Left leg slightly smaller than the right.

The abdomen, first examined, disclosed a womb having the natural appearance of a virgin uterus.

Bladder and kidneys normal, as well as the remainder of the viscera and contents of the abdomen.

Chest, viscera all normal.

Head, brain, medulla, and the upper portion of the spinal chord, normal.

Microscopic examination of the crural nerve showed normal structure.

The whole report of the case is very short, and is a very remarkable medical paper—first, for its straightforwardness, simplicity, honesty, and the apparent truth of its report of the case, and post mortem appearances. These are all shown from internal evidence. Second, for the fact that, after seven consecutive years of truly terrible suffering, treated in that time by at least a quarter of a hundred doctors, of all shades of practice, the patient comes to her demise with good *embonpoint*; and an ordinary post mortem shows the contents of her abdomen, chest, head, and upper part of spinal chord, to be in a condition, considered by the examiners present, to be that of health; the diagnosis of every medical personage connected with the patient during these seven years shown to have been erroneous, demonstrated, as those who made the post mortem examination thought they had demonstrated, to be altogether wrong. And yet a part of these medical gentlemen (or ladies?) connected with the case during its continuance, were certainly not either numskulls or greenhorns, and surely had investigated the case in the methods sanctioned by the highest professional authority and usage; but the autopsy shows that they were no nearer right than some of the ignorant pretenders certainly connected with the case during its progress.

The post mortem was apparently such as is commonly considered satisfactory, and sanctioned by the highest professional authority. But it failed to show any cause for either the sufferings or death of the patient. And the account leaves the reader, or student, to infer that the train of morbid phenomena, which continued through seven years, and then terminated in death, was independent of any changes of structure. An inference certainly not justly deducible from the post mortem, or rather the published account of the post mortem of her body, as it is the purpose of this paper to show.

Having so recently conversed with the Jewish butcher, it was not unnatural that I should contrast what he told me he did with every animal he slaughtered, and what these professional

gentlemen state they did with this young lady's body. And the conclusion, that they had made but a Jewish butcher's post mortem, could not be got out of my mind. For it was not, certainly, such an one as Brown Se-Quard, or Pliny Earle, or Radcliffe, or a hundred other pathologists now living, and engaged in the study of morbid anatomy, would have made. None of these would have been satisfied with a Jewish butcher's post mortem in so interesting a case as this young lady's body offered for study. Nor is it likely either of them would have handed her body over to friends for interment without finding and demonstrating the changes of molecular forms of structure which certainly did exist, as demonstrated by function during life. And it appears to me that the gentlemen who made the post mortem have demonstrated, not that a human being can evolve during seven years such a train of morbid phenomena as was presented in this young lady's case, but rather that Jewish butcher's post mortems, on human beings, ought to be abandoned by the profession, for certainly in such cases as this, morbid anatomy, as a science, has outgrown them. A profession claiming to be wise, learned, accurate and scientific, ought not to have any occasion for making such a humiliating confession as is contained in this published paper.

Either function is the language or expression of organic structures, or our symptomatology is all wrong; for the proper interrelation of symptoms is confessedly, and really, based on changes of the molecular forms of structure, or molecular activity, or both, in the different viscera and textures of any living body.

That changes of structure were present in this young lady's body there can be no shadow of doubt, and it is equally certain, that the kind of post mortem made failed to disclose them.

The distinguishing feature of her symptoms during life were the purposeless display and volume of mechanical force. Physiology points to the nerve masses, plexuses, spinal chord, medulla and brain for the organic conditions and source of the normal force, which this young lady presented in such aimless and meaningless excess during a part of her life: and pathology and morbid anatomy demonstrate its correctness in more ways than one. Cases precisely opposite in character, or paralysis of one or both lower extremities—normal force annihilated—

are sufficiently common not to be considered rarities. And pathologists and morbid anatomists have no difficulty in tracing the loss of power to loss of molecular forms of structure in the nerve masses. And as this young lady presented simply an aimless excess of a normal force, it was due to change of molecular forms of structure in the nerve masses, even though the post mortem failed to disclose them, as such post mortems always have, and always will fail to disclose them, in any given case. Had they been thus looked for, the microscope and proper manipulations would have shown them with absolute certainty.

She had had, seven years previous to her demise, a serious illness, named as typhoid fever; behind which, and previous to which, there had been loss of dynamic capacities in her tissues; and the purpose of the febrile phenomena was the removal of her defective tissues to the end that they might be reconstructed with normal dynamic capabilities. This train of phenomena is necessarily accompanied by an increase of the velocity of normal molecular work, as evidenced by increased temperature; for temperature can only be elevated above the normal standard by increased velocity of chemical changes, or molecular waste, more plainly visible in the circulation, respiration and heat of cutaneous surfaces than elsewhere; but otherwise evident in changed functions and dynamic capacities.

These higher ranges of temperature, depending as they do on increased activity of molecular work in all living beings, are hazardous to the molecular forms of structure of the nervous masses and certain viscera, as the kidneys, in definite ratios for each degree of elevation above the normal standard to that point where they are lost. In the very brief account of this young lady's case no mention is made of temperature at any time during her first serious illness at fourteen years of age, or subsequently. Nor is it stated whether she had had a fall, or other violent concussion or shock (which, by the way, are merely increased mechanical motion, and do mischief only by breaking up molecular forms of structure) previous to or succeeding the fever. Nor is it stated whether she had had either of the so called exanthemata, as scarlet fever, measles, etc. Information in regard to either of these circumstances would throw much light on the subsequent history of the case. But that she did.

from some cause, lose molecular forms of structure in one or more of the nerve masses or spinal cord, is as certainly true as that the introduction of a new mass of matter, equal in bulk to the earth, into our solar system would disturb its harmony. These things do not occur without causes, or outside of the pale of law, any more than the train of morbid phenomena manifested by this young lady. And an autopsy, guided by these certainties, would have revealed the changes of molecular forms of structure to which the purposeless volume and display of mechanical force were due. The good *embonpoint* of the patient attested that the processes of ordinary repair and waste of structure proceeded almost in a normal manner; and taking into consideration that the expenditure of muscular force required a corresponding amount of food, her craving appetite is readily comprehended, and the processes of repair and waste may be regarded as altogether normal; and when it is remembered that, during the whole seven years of her illness, she was taking more or less medicine all the time, the subject of experiment by so many doctors, much of which could hardly fail to interfere, to some extent, with digestion and assimilation, she certainly must have had a very high grade of organic life; and had not the molecular forms of her nerve tissues been lost, she would, in all probability, be living now in high physical health. But the mechanical force which would have moved her body about in labor, society or recreation, common to youth, was aimlessly and purposely expended in keeping her leg flexed, and in spasmodic movements. And these changed functions demonstrated that at certain points, designated by both physiology and pathology, molecular forms of structure had been changed or lost.

The following conclusions are reached by my study of this most interesting case:

1st.—That no “new remedy”—not even a peer of chloral—can compare in importance with a new system of post mortem examinations, corresponding with the advanced state of physiology and pathology.

2d.—That post mortems, to expose to view the more obvious lesions of the contents of the cranial thoracic and abdominal cavities, except for purposes of demonstration to novices, do not now throw any new light upon pathology and therapeutics, nor physiology.

3d.—That post mortems, to be of any use in cases confusedly obscure in diagnosis, must include examinations of the minutest structures of the parts to which changed function during life point as the probable seat of the lesions.

4th.—That from such post mortem examinations as are here indicated can there be any hope of new light on pathology and morbid anatomy.

5th.—That though such examinations may consume time, possibly cost a little money and a good deal of labor, their results will fully compensate any and every explorer and investigator so employed.

TRANSVERSE OR CROSS PRESENTATION.

By JAS. W. BUNN, M. D., Jacksonville, O.

I was called to visit a woman in her second confinement, aged twenty-three years. I ascertained, upon inquiry, that during her first confinement she had had a very serious time. The labor was tedious, and lasted some thirty-six hours, when she was delivered of a fine healthy child, which exercised its lungs freely as soon as it emerged into the world. After the child was separated from its mother, upon examination a footling presentation of a second child was made out. (The presentation of the first born, however, was natural). But labor seemed to be entirely gone, and after the accoucheur wasted a sufficient length of time, failed, with the addition of parturient remedies, to bring about labor again. She was delivered then, as soon as possible, of a still born child, well developed, etc.

After I had been in the room perhaps one hour, during which time the woman seemed very jovial, and labor did not amount to anything, I concluded to make an examination, but could not ascertain the correct presentation. The os was dilated to the size of a half silver dollar, not rigid, but very flabby. I concluded that ample time would be afforded me to visit a patient of mine about a quarter mile distant, which I did, and returned after an absence of perhaps one hour. I made another examination and found the membranes protruding; at once I discovered that the presentation was an unnatural one. After making this discovery I was led to inquire into the history of her first delivery.

which is stated above, etc. During the time that I was being summoned to see the patient, which occupied about three hours, she seemed to suffer a great deal, and labor, seemingly to all present, was progressing, as they thought, very favorably and naturally. After my arrival she had no labor of any consequence. In fact, labor soon left her entirely. I used every remedy to bring it on again, but just as often failed to accomplish my purpose. The membranes were protruding. I ruptured them, and soon the right hand and arm was delivered, the child lying across the superior strait, with it back to the mother's back, and its abdomen towards the mother's abdomen, the head in the right iliac region. Upon further examination I found that the child was living. At once the three modes of version occurred to my mind. After reflecting for a moment, I concluded, if possible, to convert the presentation into a footling one. I gently and carefully introduced my hand, and began searching for a foot; very soon succeeded in bringing down the right foot. I was greatly gratified with my success, it requiring but a few efforts until I brought the right foot down. Labor with this mal-presentation is, as the statistics show, extremely dangerous to both the mother and child. I proceeded at once to deliver by the foot (the toes being directed forwards) by gentle traction. I succeeded in delivering the woman of a fine healthy child, that would weigh between nine and eleven pounds, and it is still living, as I saw the child only the other day. The arms were both stretched out above its head, the left leg was closely pressed to its body; hence the protection to the neck by the arms, leg, etc. After the version was completed in the pelvis, I delivered the patient, with the face of the fœtus directed towards the mother's perineum, and the occiput towards the symphysis, etc. I do not think that I consumed more than five minutes' time in completing the delivery, and during that time, and one hour previous, the woman had had no labor.

Now this is the peculiar characteristic in the case. I have had several cases of similar mal-presentations, but labor was always excruciating, and the great difficulty was always in introducing my hand into the uterus in order to effect a version. But in the case under consideration I had no difficulty whatever in introducing my hand, as the parts were perfectly relaxed, and the os sufficiently dilated. I succeeded in accomplishing the

version without inflicting but very little pain to my patient. Now in these kind of presentations the labor is invariably very severe, too strong for the patient to endure long: decision and action must be immediate. This, up to the present time, has always been my experience. The case of Mrs. B. was diametrically the opposite. I was truly very successful in this case, but do not anticipate I will ever have such another peculiar case, should I be so fortunate as to live out my three score years and ten, and during that whole time be engaged in the practice of medicine.

I am fully satisfied in my own mind that if I had converted the presentation into a breech in place of a footling one, I would have had to use the forceps before a delivery could have been effected; had I converted the presentation into a breech one, the probabilities are the child would have been still born.

MEMOIRE UPON GANGRENE OF THE PENIS.

By M. DEMARQUAY. Translated from the "Archives Generales"
By T. C. MINOR, M. D., Cincinnati, O.

(Concluded from May No.)

INFLAMMATION OF THE PENIS.—Of all the causes that I have enumerated, there is not one, by itself alone, can produce gangrene of the penis. Inflammation is the obliging proof of each one of them; for gangrene can not be produced without seeing it developed in a certain degree. Alone, inflammation, may sometimes constitute the initial phenomena and the termination of gangrene.

The ancients have easily divided the question of inflammation by saying that it swells and distends the parts, dismembering and destroying the vessels.

Hunter has left us a reducing doctrine upon the inflammation that precedes gangrene. His theory of increase of action with diminution of vital energy is full of attractions, and I must avow that it is the most satisfactory of explanations.

We will consider in inflammation of the penis simple *balano posthitis*, *phlebitis of the dorsal vein*, and *penitis*.

1st. It is not rare to see gangrene occur at the end of a *balano posthitis*. But this complication is manifested the more when the surface of the glans or of the prepuce is found covered by

ulcers.* In this case it produces a capillary phlebitis. (Desruelles).

2d. Gangrene limits itself, then, to the prepuce, and invades the sheath of the penis; but this last case is rather the sequelæ of a phlebitis of the dorsal vein, which may be the consequence of the abortive treatment of a blennorrhagia.

3d. It is in these cases that we have seen occur a general phlebitis, a true penitis, of which the consequence was the entire loss of the organ.

These are the cases, above all, which complicate a gastro-enteritis, simple or typhoid.

It is not rare to see following, under the influence of more or less rapid inflammation, an ulceration which destroys and perforates a portion of the canal. More often, in the meanwhile, it is not in similar cases that we observe the rupture of the urethra. Whatever, then, it may be, it permits the passage of the urine from the breadth of this gap, which from thence distributes itself into the cellular tissue of the penis. The liquid penetrates, from mesh to mesh, into the neighboring cellular tissue; it removes them easily, diffuses itself into the perineum, the scrotum and the penis, sometimes reaches the groins and the inferior part of the abdomen, and brings about in this way irreparable disorders.

The perforation of the urethra may be due to an exaggerated distension of a part of the canal situated back of the contraction; it may be the consequence of a false passage in the operation of catheterism; it may result from the falling of an eschar at this point. It always, whatever may be its formation, gives passage to a putrid liquid, of which the action is manifestly hurtful to the tissues which it passes over, since they are invariably destroyed.

How does this happen? Does the urine act by its urea, by its uric acid, or by its products of decomposition? I believe I am able to affirm that the urea is incapable, in itself alone, of producing the phenomena of gangrene that we observe. It results from experiments which I have made upon rabbits, that injections of urea have never produced gangrene of the parts which have undergone injection. I have introduced at different times, and into many rabbits, considerable doses of urea (two to twenty grammes), and when there had been the usual symptoms, they

died promptly, without presenting any other phenomena than a very rapid inflammation of the parts where the injection had been made; a reddish violet color, sometimes livid, were the only evidence of the operation submitted to by the animal. These experiments will be elsewhere undertaken, and the results, carefully written down, will clear up, without doubt, this question of sphacelus by the introduction of urine into the coats of the cellular tissue; they will permit the establishment of the fact whether the gravity of the phenomena produced is only due to the action of the air, or to the penetration of the urine into the tissues. I will only add at the present, that all rabbits experimented on died, after a greater or less length of time, in a state of skeleton-like emaciation. One of them presented a tuberculous testicle.

In order to finish with the etiology of gangrene of the penis, I will cite, as something able to facilitate its development, epispadias, or better hyhaspadias. It is not rare, under these circumstances, to find patients suffering with these vices of conformation, congenital or acquired, obliged to be sounded to determine where the eversions of the urethra are at the same time destroying them, and facilitating in this manner the penetration of the urine into the cellular tissue of the penis. From thence forth, it becomes urgent to remedy this state, if we do not wish to see the phenomena of mortification rapidly set in. These anatomical dispositions contribute from thence only indirectly to gangrene of the penis. Alone, they have no right to produce this state.

SYMPTOMS OF GANGRENE OF THE PENIS.—In the presence of the very numerous causes which may give rise to gangrene of the penis, it is difficult, impossible, at the same time to trace an exact and complete circle of the symptomatology of this affection. We understand from thence what varieties may spring up, like occurrence, in presence of such or such a cause, having given rise to mortification in one or many parts of the penis.

Therefore, I shall proceed to look at gangrene in its three different states: the period of invasion, the period of formation, and the period of its perfect state.

This is not the place to question those precursory phenomena which precede from one to many days the morbid manifestation and which are characterized, in a general manner, by fever, chill

loss of appetite, insomnia, all characteristics that may be related to a different state of phlegmasiæ. These are the same precursors which often connect to a typhus state the phenomena observed.

1st. If we consider locally that which takes place upon the penis, or the point of the penis which becomes gangrenous, we may see, following the period of invasion, the skin, relaxing little by little, give way: there will be a slight œdema which preserves, already, the digital impression, the tegumentary coloration tarnished, sensibility diminished, no pain, temperature lowered. 2nd. Later are formed phlyctides (the hydatids or vesicles of the ancients;) their number and volume varying much, they become filled very soon, more or less, with yellowish or reddish serosity; they are not, elsewhere, constant in their appearance. 3rd. Gangrene makes, from thence, rapid progress; the insensibility of the skin increases, the temperature is lowered more, the coloration wholly darkens, gangrene is established, the sphacelated mass is black, soft or hard, owing to circumstances; it shrivels, hardens; sometimes it is dry and resonant; it presents at its periphery a sinuous, excavated line, reddish, bloody at the sides of the healthy parts; this is the line of elimination; it is pronounced from the fifth to the twentieth day, more generally towards the tenth day.

At the same time that these local symptoms follow their evolution, the general phenomena pronounce themselves with a variable intensity, and proportionally as to the gravity, and to the extent of surface of the gangrene. Fever is lighted up, the tongue becomes dry, parched, pulse quickened; respiration accelerated, sometimes anxious. It is not unusual to see œdema of the inferior extremities; diarrhea, insomnia, delirium, followed at the same time by coma. Death terminates, in the end, this train of sufferings.

It, in particular cases, presenting special lesions, and consequently special symptoms—the symptoms vary from thenceforth, following the complications that spring up.

The progress may, in certain cases, be so rapid as to bring about a good termination of the symptoms which, at first sight, would have seemed bound to last some weeks. It is in this way that the lesion of the urethra brought about, in some cases by the bistoury, or the decay of an eschar, has not at all impeded the progress of the gangrene, while, under other circum-

stances, the disease is terminated by this same lesion of the urethra, by a fistula, which lasts sometimes several months. Dr. Ange communicated to me a curious abbreviation, viewed from this stand point. The patient of whom he speaks, had a circumscribed gangrene of the penis, following paraphimosis. In raising the eschars of the skin of the urethra, he injured the posterior wall of the canal, which then sphacelated; the urine flowed afterwards by the meatus and by the fistula; but some weeks later, the urine flowed only by the glans. The case of which Boerhaave speaks, was not as fortunate; he operated on a man aged forty years, who, attacked by retention of urine, had a sphacelus of the scrotum and of the penis. Eschars were produced at two points upon the urethra, at the level of the bulb, and at the navicular fossa; but far from cicatrizing spontaneously, as in the proceeding observation, these two fistulas persisted in spite of the wise employment indicated of the immovable sound.

The *complications* that may come about *suprapos* to gangrene of the penis are extremely varied. The urinary infiltration, in some cases, takes such an extension, that it has brought about mortification of all the sheath of the penis, the scrotum, the abdominal walls, and the superior portion of the thighs; in one case the testicle was wholly detached.

In the presence of general symptoms observed in similar cases, some authors, M. Olivier, of Montluel, among others, believes that the gangrenous localization in the penis was, thenceforth, a critical phenomenon complicating a more grave affection. In the meantime, the same as in this case, gangrene seems to us a thing already serious enough by itself, and needs not to be assigned a secondary rank.

Purulent infection may also accompany mortification of the penis, wholly or in part. It is then that we find that smallness of pulse, that Astruc attributes to the introduction into the current of the circulation of drops of pus, which, thickening it, retard its course, and diminish the fever. M. Richet has described a case of this sort.

I have besides observed, among the complications of gangrene, orchitis, following a full evolution from the gangrenous eschar. A young man, aged 33 years, and who was still in my *service*, in the month of September last, presented this peculiarity.. Numer

ous incisions were made upon the scrotum, and the patient finally recovered.

Finally, I will describe, as a symptom happily very rare, hemorrhage consecutive to gangrene of the penis: either it was the result of simple ulceration, or it may have been owing to the progressive invasion of mortification. This observation, unique I believe in the science, is too precious not to be introduced entirely.

OBSERVATION.—*Partial gangrene of the penis; hemorrhage from ulceration. Death.* (Service de M. Demarquay. Maison municipale de sante. Observation recueillie par M. Pouilloux, interne du service.) M. X—, aged 69, stockbroker, entered the 5th of January, 1870, has had blennorrhagia twice since an adult; is suffering from asthma with bronchial emphysema.

For four days, retention of urine, complete since two days. Repeated attempts at catheterism, false passage; slight hemorrhage from the *meatus urinarius*.

The 6th. Introduction into the bladder of a gumsound of large size, left remaining, renewed the 10th.

12th. Double pulmonary congestion, intense fever, copious diarrhea.

15th. The fixed covering of the sound (diachylon and cotton) has produced considerable œdema and pain in the skin of the penis: it is removed. The sound is fastened by cotton bands to the thighs and waist.

20th. Black and dry slough on the posterior face of the penis, upon the urethra, and at the level of the surface in contact with the fixed covering.

22d. The slough is eliminated, and leaves a circular solution of continuity of the size of a two franc piece, through which is perceived the sound introduced into the canal. The edges are cut as by a punch; the inferior third forms a pad, projecting and bloody, thick and hard; its hardness extends to the sub-adjacent portion of the canal. At the level of the right third of circumference of the ulceration, the skin is removed and denuded of its cellular tissue, from the formation of an unfractuity, from whence dribbles a considerable quantity of blood. A small portion of this blood flows outside, the rest falls into the canal, and from it into the bladder; so there flows by the sound much black blood, fluid, modified by the alkalinity of the urine, and est-

mated at about one litre (2 1135 pints) in the twenty-four hours.

23d. Hemorrhage by ulceration continues; the blood falls almost wholly into the bladder, the patient, very feeble, resting constantly in the dorsal decubitus; the tongue is a little dry; the diarrhea persists. Every three hours we removed the faucet of the sound in order to evacuate the bloody contents of the bladder, which would be left otherwise easily distended.

Two days following the hemorrhage persisted; the lips, the tongue and the teeth, were covered with fuliginosity; and the 25th, at eight o'clock in the morning, the patient died.

At the autopsy we found the bladder filled with blackish blood, partially liquid, partially coagulated; the prostate, formed of two lateral lobes, without a median lobe, is globular, rounded, and the size of a billiard ball.

At this level the contracted urethra is black, ecchymosed, fretted at many points. A little more to the right of the median line is seen a beaked orifice, which leads into an abnormal passage, a little oblique from above downwards, and from forwards backwards, into which the sound can be made to enter from one and a half to two centimeters (equals from six to eight lines, Trus.) in depth. Aside from the loss of substance, pointed out during life, the sphacelus had extended downwards and backwards, involving the skin and sub-cutaneous tissue, but sparing the cavernous body and scrotum.

The *duration* of gangrene of the penis is very short generally: the ordinary evolution is only some days; nevertheless, it may last several weeks or months. Such are the cases in which the sheath of the cavernous body has been attacked by sphacelus.

When frequent and repeated chills have made us fear a purulent infection, the disease has a much longer duration; convalescence is slow; the vital forces are only reanimated little by little; the healing takes a very long time to consolidate itself.

Under some circumstances, in spite of the lesions that we have observed, the result has been very brilliant. In cases in which the glans has been eliminated it removes itself in some way, as a clot, leaving bare the anterior part of the two cavernous bodies. It would seem as though the organ could not recover its functions, owing to this loss of substance. However, such has not been the result. Numerous masses of proud flesh recover the

surface of the cavernous body; some cauterizations aiding, a kind of glans is found reconstructed in a variable time, without doubt, but relatively very short. In many patients, at the same time, the tegumentary sensibility develops itself to the point of provoking imperious desires, and of experiencing sensations almost analogous to that of an epoch anterior to the gangrene.

Dr. Jacques Jamieson, of Kelso, has published a case of gangrene of the glans and of the penis in which reproduction was finished in seven days; the urethra, it is true, remained larger; but the young man on whom he operated married two years later, fulfilling perfectly all his genital functions, with the exception that sensation was the least bit enfeebled. He had two children.

Dr. De Lavercherie, of Liege, has also communicated a case of sphacelus of the penis, with reconstruction of an anterior extremity simulating a true glans. In this case, the proud flesh of this proliferent surface, repressed to an opportune time by frequent cauterizations with nitrate of silver, finished by reuniting so intimately, and presenting a surface so rounded, so uniform, that whoever had not seen the penis in the worst of the disease would not have believed that it had been deprived of its glans.

In leaving to this observation of M. de Levacherie all the interest that it presents, I can not prevent myself from pointing out that, if there had been a reconstruction of a head resembling a glans, it did not act as a true glans, as the author seems to think. We have spoken much of the reproduction of the spongy tissue of the glans; but it is very nearly certain that, when this reproduction was performed, the glans had not been removed entirely; there must have remained a part of the spongy tissue, which from thence served as a base for proliferation. But that which was most remarkable in this case is the new formation of nervous filaments, re-giving to the organ almost its first properties. Is there here such an activity of action that the disorders are so soon repaired? it seems as though nature had foreseen this case from a point of view, for the reproduction of the species, and had advanced the remedies. The histological examination of this question must, then, be carefully made; it will furnish, without doubt, in this respect an explanation full of interest.

DIAGNOSTIC.—The diagnosis of gangrene of the penis presents

no difficulties, and can not awaken any doubts save at the commencement of the disease. But its progress is so rapid, the phenomena of decomposition are so clearly defined, that all hesitation quickly disappears.

Nothing more, then, remains, than to establish the limit of the affection. As in all gangrene, this is accompanied by the circle of elimination, of which the presence is the guarantee of the limitation of the disease. The separation is then made, little by little, gradually and without effort, and permits the surgeon to well assure himself as to the parts damaged.

Under some circumstances sphacelus only manifests itself outside by an opening which gives passage to the sphacelated fibrous sheath of the cavernous body. It is this which takes place in penitis; but, in that case, the primordial phenomena aid in the diagnosis. We can not conclude as to gangrene of the glans in phymosis, only after having incised this latter, in order to discover the portion of the penis supposed to be attacked.

As to the depth of the mortification, it is necessary, in order to be perfectly sure, to scarify the tissues until pain prevents the surgeon from cutting further; then he knows that he has touched a part still living. There then flows a little blood, which dissipates all doubt in regard to the subject. For the remainder, the diagnosis is often drawn from the causes themselves of the disease.

PROGNOSTIC.—As to prognosis, it is necessary to use great caution, in order to establish it. We have seen what almost happy termination may crown this work of destruction. It is in certain cases where the loss of the glans, wholly or in part, has been a thing almost without importance, when that individuals have recovered their energy and almost their sensibility. In the meanwhile it is far from being always thus. The disorders are sometimes considerable, and all hope of a return of health must be eliminated. The prognosis of gangrene of the penis rests, is understood better as regards the lesion, and its greater or less extent, upon the depth to which it attacks the tissues.

The loss of the prepuce is without any other importance than that of diminution of the sensibility of the glans.

But when gangrene has occupied one of the cavernous bodies only, there is produced a loss of substance which is replaced by acicatricial tissue, and which, on the return of the genital func-

tions, and phenomena of erection in particular, brings about injurious modifications. The penis curves itself from the side which has been attacked. It folds itself up at an angle more or less pronounced, and renders in this way coition more or less difficult, at least painful to the woman, at the same time may be impossible. Ejaculation may be, by this means, notably modified—abrogated at the same time. The consequences are from this very serious. The individual attacked morally falls into a profound discouragement. The loss of this reproductive function exercises a disastrous influence upon the life of the unfortunate who is attacked by it: it is not rare to see him fall into a decline, from which death is not long in taking him.

The complications of gangrene of the penis singularly modify this prognosis. The latter is always subordinate, all things being equal, than otherwise. We understand in this way what influence chills may exercise which we have demonstrated in some cases. It is from thence, after the general symptoms prescribed before, that it is necessary to establish the prognosis.

TREATMENT.—From thence it seems that this question of therapeutis only merits secondary attention, so much is evidenced in the line of conduct of surgeons in similar cases. Opinions are, moreover, far from being in accord upon this point; ancient or modern, all authors have omitted their manner of seeing it, so little are they convinced.

Like Astruc, I have established the symptomatology of gangrene of the penis following its periods of invasion, of progress, or of state; to prevent gangrene when it is only imminent; in arresting its progress when it only has commenced; to extirpate it radically when it is confirmed—such is the plan the practitioner must fulfil in like cases.

A. We can generally prevent gangrene by favoring the sanguinary circulation as well as that of the lymphatic vessels. Scarifications, of more or less depth, will disgorge the tumified tissues, and will serve to prevent the phylactories and the islets of sphacelus, which are the consequence of the distension of tissues. The sanguinary loss in these cases may be so considerable as to preoccupy the surgeon, who, above all, will remember how much, under certain circumstances, he must be careful of losses of blood. So he will introduce between the lips of the wound a simple pledget of charpie, as much to arrest a too great

loss of blood as to stimulate the bleeding surface, so nearly mortified itself; or better, a pledget saturated in aromatic wine. The ancients fomented the parts with brandy, with tincture of myrrh, etc. only to provoke suppuration. It is sometimes necessary to depress the patient by practicing phlebotomy; but the cases are rare. Temperate and diluent drinks are always indicated.

It is necessary, then, in like circumstances, the surgeon should calculate the causes which may render imminent this gangrene of the penis. Perspicuity must, above all, be exercised at this moment. It was thus in a case of constriction of the penis by a ring, which would have tended infallibly to produce gangrene, that Bourgeois did not hesitate raising a portion of the corona of the glans, which opposed the loosening of the constricting band. The patient was left with some scurs on the prepuce and back of the penis, and convalesced at the end of two months.

B. When these precautions are insufficient, and when the gangrene progresses, it is urgent to change tactics in order to oppose a disease which destroys all.

In order to attain this result, the ancients perceived that it was necessary, above all, to prevent the deposition of obnoxious humors around the focus of the gangrene. So they took care to provide the healthy parts with deteratives, composed of astringents, such as the famous cataplasm of "Armenian Bole," clay, nut galls, Cyprus nuts, pomgranate rind, myrtle root, the whole powdered and baked with barley flour in oxymel. Then they only scarified the circumjacent parts, bathing, fomenting with salt water, applying cataplasms, and consuming all that which was sphacelated with an Egyptian or other ointment (trochisque d'Asphodele).

Wholly rational as it may seem, for a long time this practice has fallen into oblivion. Astruc, however, suppressed this cortege of pomades, unguents, astringents, etc.

Already, at this epoch, it was a question of actual cautery for arresting the progress of the gangrene. I have myself put it into practice in my service, and I can appreciate the happy effects of it. Among other cases I will cite that of a young man of thirty-four years, entered into my service the 27th of July, 1868, to be treated for chancre of the glans, complicated by gangrene of the prepuce. A slight cauterization sufficed to

arrest the invading march of this gangrene, the cause of which for the remainder was wholly local. Twelve days after the patient recovered.

Arsenic and its preparations have in former times been held in esteem for the purpose of subduing the invasion of gangrene; but the reign of this popular medicine was not of long duration; they very soon supplied more simple local medications, and limited themselves to bathing, fomenting, detarging the sore; in a word, doctoring the symptoms.

In our day it was believed that citric acid would exercise a happy influence upon the progress of gangrene of the penis. Gallozzi commenced this treatment, which, in his hands, limited the gangrene, detached the eschars, and transformed in this manner a gangrenous sore into a simple sore, which from thence progressed rapidly towards a cure. But citric acid was not always sufficient, even in the hands of its *presentateur*, to combat the invasion of the gangrene, as Gallozzi believed it his duty to publish a second case where this acid proved powerless. It is just to add that the acid nitrate of mercury can no more limit the mortification of the penis, and that it is necessary to use red oxide of iron for transforming the gangrenous ulcer into a sore, normal and simple.

C. It unfortunately happens too often that the successive employment of scarifications, cauterizations with red oxide of iron, etc. are still insufficient means to arrest the progress of the disease. There remains nothing else from thence forth than to extirpate the sphacelated portion. But here a question of the highest interest presents itself, upon which surgeons are far from being unanimous.

Galen did not hesitate "removing with the knife that which is gangrenous, and afterwards burning the sore."

A. Pare goes, at the same time, so far as to pretend that in the case of gangrene and mortification of the penis, "it is necessary to perform amputation in order to avoid death."

B. Bell and Patissier establish a distinction between the case of gangrene, which recognizes as a cause a general adynamic state of the constitution, and that which is dependent on a local cause. So they arrive at this conclusion, that it is in cases where expectation is not permitted, and where art must promptly intervene.

Finally, Petrequin, of Lyons, based himself on this fact of experience, that often an operation modifies very advantageously the vitality of the tissues, so that a suppurative phlegmasia of a good kind is developed and produces a durable cure, reviving the procedure of the ancients, and practicing amputation of the penis before the limitation of the gangrene. A patient, aged 24 years, having gangrene of the prepuce, permitted him to make the application of this principle.

In spite of the opinions of eminent surgeons that I have cited, it is impossible for me to accept this manner of looking at it. Berard, moreover, and Vidal himself, have already left to nature the care of limiting the gravity of the disorders produced. Gangrene of the penis, says Begin, never require ablation of this part; it is proper to await the spontaneous separation of the eschars.

S. Cooper is assured that no part of the penis must be amputated in case of gangrene, because the mortified portion falls off naturally.

But is it not evident then, when that the gangrene is limited to the cutaneous coverings of the penis or scrotum, the operation is superfluous work? elimination is a sure action without that. Hardly is it wanted to detach, with scissors, the mortified shreds. And when gangrene is the doing of an external cause the precise point where the mortification will arrest itself is rationally foreseen. Here still amputation is useless; it will change nothing in an effect which is already produced. We cannot speak thus in presence of a gangrene from a genotypus cause. In the meanwhile, here, moreover, has one the right to conclude to arrest the gangrene by the ablation of the mortified part? But the cause which directed the sphacelus in this first portion continues to act and to expose, consequently the surgeon attempts a painful operation; useless, capable at the same time of creating new symptoms. So I think myself able to inculcate this principle; never urge amputation of the penis beyond the sphacelated portion. It is on account of the vitality of this region that I have been led to declare myself in this manner.

For the remainder, amputation is not always sufficient, and in cases where it is agreed to use the bistoury, when the gangrene is limited, it is also prudent to continue mercurial preparations in order to prevent the least complication.

Amand has described a case of gangrene of the penis, caused by an "external primitive gonorrhœa," where it was necessary to continue for the space of five weeks the administration of mercurials.

It is wholly informal opposition to the method of amputating the penis before the very slightest limitation of the gangrene. I am far from opposing all operation upon this member attacked by sphacelus. It is in cases in which the destruction is only made upon certain points of the organ, respecting other more important parts, but placing them in such a physiological situation that their functions are henceforth impossible.

Such a one is the very curious case Delavacherie, where there had been gangrene of the whole sheath of the penis, with integrity of the glans, cavernous body, and of the urethra. Favored by an auto-plastic operation, intelligently performed, the penian member was placed in a new sheath. The patient not having been followed up it could not be affirmed that the penis, after this operation, had developed itself in length, and fulfilled the purpose for which it was destined.

However that may be, the imperfect elasticity following this operation would not seem to me to create an obstacle to the vulgarization of this surgical intervention. In wounds of the penis there is produced, little by little, around the cicatrix, a new spongy tissue which contributes, slightly, without doubt, but really, to the development of the penis, it erects itself and resumes, more or less well, it is true, the exercise of its function. That which would be curious to study, would be the sensibility of this new tissue.

In finishing with the therapeutics of gangrene of the penis, I should have spoken of the camphorated creosote that M. Lavit experimented with, and which furnished him with a good result.

RESUME

Of the Spring Course of Lectures on Ophthalmology in Medical College of Ohio.

BY PROF. SEELEY.

We have had a short course, gentlemen; yet, in the few weeks, if you will recall the cases, you will find that quite a

large field has been passed over. Among the anomalies of refraction and accommodation, you have seen examples of asthenopia arising from hypermetropia, cases of myopia and presbyopia. Also a rarer case illustrating the effects of presbyopia on myopia, showing you that an eye may be at the same time myopic and presbyopic.

Then you have seen cases of acquired hypermetropia in my cataract patients, resulting from the loss of the lens.

Among the medical cases you will readily recall those of blepharitis marginalis, characterized in the beginning by scales forming among the eyelashes and small abscesses, causing the cilia to become sparse, and, in the long continued cases, producing madarosis or baldness, and a rounding of the margin of the lids, eversion of the puncta and consequent epiphora. You have seen cases of conjunctival trouble hyperaemia, catarrhal conjunctivitis, and trachoma—and have had the points in differential diagnosis brought out. You have had an opportunity to contrast the injection of the parts in conjunctival troubles with that of corneal and iridal; further, I have given you an opportunity of differentiating between opacities of the cornea and effused lymph in the pupil and cataract. I have shown you the results of the cicatrization and contraction of that gelatinous mass into which granulations become transformed, the cupping of the tarsal cartilages, absorption of the ocular edge of the free margin of the lid and the inversion of the lashes.

Of the pterygia we have only seen the so-called pterygium tenue—a pterygium being, as you will remember, a triangular thickening of the conjunctiva and sub-conjunctival tissue, occurring most frequently over the internal rectus muscle, and, in some cases, invading the cornea, a simple fold of hypertrophied conjunctiva and sub-conjunctival tissue, a microscopical examination of which reveals only the preexisting structures of these tissues. I called your attention to the difference between a pterygium proper and a periguecula, the latter being almost always, to some extent present, and seldom of any significance. Among the diseases of the lachrymal apparatus, there have been cases of eversion of the lower punctum and consequent epiphora, stricture of the canaliculi, dacryocystitis, and strictures of the nasal duct. We have had idiopathic and traumatic inflammations of the cornea—and you will recall the general indications.

no irritating eyewater—tonic course, even sometimes in the traumatic form, especially if the recovery seems slow. In the chronic ulcers and indolent abscesses, you have seen warmth applied, either in shape of warm water or poultice, for fifteen or twenty minutes, two or three times a day—bandages the rest of the time and atropia and supporting treatment. Of the iridal affections, all the cases that have been presented have been distinctly of specific origin; only one, however, where, you remember, the condylomata were seen, carried with it the characters pathognomonic of a specific origin. All the others may come from other causes.

Locally, the symptoms have been combatted with atropia (grs. iv to 3j.) and leeches. Constitutionally, with mercury and opium, followed by the iodide of potassium. I have told you that when I want to get the patient under the influence of mercury as speedily as possible, in parenchymatous, or condylomatous iritis, I much prefer the inunction method, rubbing half a drachm of the mercurial ointment three times a day on the skin at its most delicate points, as the inside of thighs and arms.

You have seen one case of sympathetic trouble of special interest, a wound remaining painful after a cataract operation—where I amputated the front of globe to relieve the neurosis of the opposite eye. I have made before you the operations for relief of entropium—with trichiasis. You will remember Arlt's modification of Paesche's was the one best adapted to the cases that presented, for the entropion was not complete, and, therefore, the more extensive operation devised and used by Graefe was not needed. So far as the very large number of cases upon which I have operated teach me I have failed to be impressed by Graefe's objections to this operation—the sloughing and destruction of the bulbs.

You have seen the operation of iridectomy practiced for artificial pupil. As a part of cataract operation, and as a curative measure in chronic iritis, I called your attention at the time to the difference between a simple iridectomy for optical reasons and to relieve tension, and also to relieve chronic inflammation of the iris, and that form for glaucoma the success of the operation in the latter disease depending entirely upon the removal of the iris up to its peripheric attachment. With regard to cat-

aract, I trust I have thoroughly impressed on your minds the prominent points. First, that a cataract is something to be removed from the eyes. I have told you "the rate of mortality" to eyes under couching, depressing and reclining, all meaning the same thing, *i. e.* leaving the lens in the eye. The only operation thought of now is removing the lens; and chief among the processes is the method known as Graefe's modified linear extraction.

In this operation we have the smallest possible wound, and that in the most favorable point for healing. Again, by making an iridectomy, the capsule can be thoroughly lacerated. Now, it is one thing to remove a lens, and quite another to give your patient good vision.

You are aware that when some of the so-called cortical portion of the lens is left—especially when covered by the anterior capsule, the cells proliferate, and you have a thick and tough capsular cataract more difficult to remove than the lens itself. Under ordinary circumstances there need be no difficulty with this operation in avoiding such a complication.

You have seen thoroughly the steps. And in the operative course I showed you the last thing insisted on by Prof. Graefe, the including by your cystotome a V shaped piece of the capsule, then cutting it off at the base by carrying the cystotome across it—in this way removing with the lens an entire piece of the capsule. Optically considered this is the great operation, for made upwards the lid covers the opening to some extent, and so whatever acquired astigmatism results is prevented, and again the blurring and annoying diffusion circles are prevented in the same way by the lid. Also, we have the least deformity, with the incision at this point so cosmetically considered is also the best position for the wound.

Probably one of the chief arguments for this operation are the facilities for looking after the eye so soon after the operation. You have seen that I open the eye from five and a half to six hours after the operation. What a contrast with the long four day's painful suspense of the old corneal flap extraction. Not that so long waiting was necessary, only customary. For the present, certainly, I can only recommend the Graefe operation. I have made a goodly number of extractions by this method with almost uniform success, two losses I believe. You

will recall a case where the next day the wound was closed. No redness about the eye. And when the patient could read ordinary print, No. 6 Pagen. In the large majority of cases I give chloroform, simply, because few people have the requisite control over their nerves to allow the operation to be made the most satisfactorily. I have shown you the manner of applying the bandage and the material.

Certainly, nothing can be lighter than the very fine cotton batting, nor with any material can you make a nicer fitting bandage. I lay it on in thin small layers so uniform pressure is made, and it can be removed in the same way. And the layers resting on the lids are moistened by the tears, so they can be removed without any risk of traction.

I have not shown you other methods, simply, because I didn't want you in the complexity of the means to lose sight of the end. I have given you all an opportunity to test your hand on the dead subject, and have shown you clearly the various steps of a good many operations on the living subject. Your own judgments and tastes will decide the practical use you will make of your experience and observation.

ANÆSTHESIA.

By H. C. STEWART, M. D., of Bloomingburgh, Fayette County, O.

DR. J. A. THACHER—DEAR SIR: A few days since I received the April number of the *Medical and Surgical Reporter*, published at Philadelphia, Pa., by Dr. S. W. Butler, and, on opening it, I found a blank petition to the Congress of the United States, based on a Resolution of the American Medical Association at Washington, D. C., in 1870, and setting forth in said petition that, to "Dr. Horace Wells, of Hartford, Connecticut, alone belongs the distinguished honor of having first demonstrated, on the 11th of December, 1844, the great principle of modern anæsthesia, and of first having introduced it into practice," and respectfully asking Congress to "take such action as may seem in its wisdom just."

On marking the date of "December 11th, 1844," I was induced to refer to my book to refresh my memory in reference to a case in which I used sul. ether as an antispasmodic. October 27th, 1843,

I was called to a Miss M—— B——, who seemed to be laboring under spasm of the pharynx, not being able to swallow fluids of any kind. Supposing the case to be hysterical, I tried every thing of the antispasmodic kind, commencing with sul. ether, and trying everything in that category. I gave up in despair, and sent for Dr. Martin, an old and experienced practitioner, to aid me. He came, and proposed that we should make another trial of the ether, which we did, but failed to get any down, for as soon as she took it in her mouth her throat would seem to spasmodically close. The doctor placed his hand on her mouth, and told her to try and swallow, but it came with a gush through her nostrils and almost suffocated her.

The doctor was hurriedly called to see a patient, and left me where I began, to my own resources, and encouraged me by saying that while he was absent he would try and think up something to be done, and would return as soon as he could. It was about 10 p. m. when he left. I concluded that I would try if she could inhale the ether. I called for a teapot, placed a little warm water in it, and poured about a teaspoonful of ether in it; placing the spout to her lips, I held her nose, and told her to breathe it, and in five or six minutes she fell asleep, and slept for half an hour, and waked up calm and easy. She called for water to drink, but when presented the spasms returned with almost as much violence as before. I again let her inhale from the teapot, and in a few minutes she fell into calm sleep, and remained so one hour; she awoke and I again asked her to inhale, and with the same result. While asleep Dr. M. returned, and she continued to sleep till 1 o'clock, a. m., of the 28th. When we talked of leaving, Miss B. said she was afraid she was going to have another spasm, so I gave her the ether again, and she soon fell asleep, and at 2 o'clock I proposed to Dr. M. that he might go home, and I would remain till day light.

She slept till sunrise, and awoke refreshed, and said she felt well. She never had any return of the trouble since.

I merely mention this case, not to detract anything from Dr. Wells' credit as a discoverer of ether as an anæsthetic: for I did not use it as such, but only as an antispasmodic.

I used ether soon after it was published as a hypnotic, and, so far as I have been able to learn, I was the first physician to use chloroform west of the Alleghenies, and I have used it ever

since, preferring it to ether on account of the unpleasant effect of the exhausted ether on the breath.

When I sat down to write, I did not intend to bore you with so much egotism, but I don't think I will "bust" now.

CORRESPONDENCE.

OBSERVATION POINT, MAY 12, 1871.

DR. J. A. THACKER—DEAR SIR: Allow me to congratulate, not only yourself and the friends of the Cincinnati College of Medicine and Surgery, but the profession everywhere who are opposed to clique combinations, on the recent action of the Board of Trustees of the Cincinnati Hospital, which places the staff of that institution independent of any medical college faculty, and makes any person holding a professorship in any of the colleges ineligible to a place on the Hospital staff. This action shatters one of the most selfish, arrogant, intolerant and wicked combinations ever organized for partisan purposes, and places the Hospital where it should have been long since, in the hands of a class of physicians who will dedicate their labors as clinicians to the good of science and the welfare of suffering humanity, having no selfish aims to promote and no selfish ends to accomplish.

How far this action is the result of the course adopted by the REPERTORY I am unable to say, and for my present purposes it is wholly unnecessary that I should even know. But it is certainly very gratifying to learn that the Board of Trustees of the Hospital have adopted a policy similar to that which the REPERTORY has advocated from the beginning of its publication. You will certainly remember the very uncomplimentary notices the first number received from such men of the editorial tripod as Dr. Logan and Dr. Allen and Dr. Murphy and Dr. Stevens—the last two a pair of unmitigated cliquers, whose selfish paths were crossed by its proposed policy. They could find no word of praise for it or the cause it proposed to advocate, and without waiting to see its capacity for strength and endurance, they rushed before the profession with such slurs and insinuations as were calculated to prevent its circulation and damage the Medical Journal Association. The forty numbers published have gone to the profession. Logan has retired from editorial honors, and I trust has ceased to animadvert on enterprises of which he knows nothing. Allen, it is to be hoped, is a wiser man than he was forty months ago; and Murphy and Stevens have realized what they long ago declared to be true, viz: that the REPERTORY is an organ, and that organs are "the most unmusical of all wind instruments." Doubtless the music of the REPERTORY has been far from soul-stirring to them as well as to other wrong-doers.

But the power of this combination is only broken, not destroyed. It is yet an element of considerable strength, and I apprehend that in the immediate future this strength will be taxed to its utmost point of endurance to prevent all persons from accepting places on the Hospital staff, hoping by this means to defeat the action of the Board of Trustees, and verify Dr. Murphy's prediction that the Hos-

pital can not be successfully carried on without the aid of the Miami Medical College faculty, and that the faculty will remain a unit in the College. He said this, notwithstanding his declaration made not three months since to my friend —, that he cared nothing for the colleges, his only interest was in the success of the Hospital. Now he says the Hospital may go, and he will remain with the College, doubtless believing that by such a course of action the Hospital will have to come to him, and it is reasonable to infer that he will use every means to make it come.

But suppose this Miami clique, by a captious opposition to the action of the Trustees of the Hospital, succeeds in preventing the formation of a staff outside of medical college faculties, what then? Evidently the experience of the Trustees will enable them to avoid in the future the almost unavoidable circumstances that have surrounded them in the past. They will leave out the incompetent portion of the staff which now holds place there by the influence of this clique, and reduce its clique power there to just what rightfully belongs to it, as a medical college organization. They will give them an equal number of members on the staff with the other colleges, and no more. I infer that this will be so because the Trustees will hardly feel at liberty to continue the injustice now suffered by the other colleges, and thereby protract the caustic controversy that has been disturbing the harmony of the profession, and greatly damaging medical college teaching in Cincinnati, to say nothing of the damage done to the Hospital enterprise and to the unfortunate inmates who have been the victims of the practice of these incompetent and careless members of the staff. They now have the power to dismiss them and fill their places with worthy and skillful physicians, not only able to prescribe for the sick, but competent to so manipulate a clinic that the student will regard it as something more than a mere didactic lecture learned from some one of the standard pathological works of the profession. But again, suppose the power of this clique in the Board of Trustees, backed up by the outside pressure it can command, should be sufficient to rescind the action of the Trustees, and re-establish the power of the clique in the Hospital, what then? The duty of the REPERTORY is plain; that is, it must "move on their works." Though it be like dividing soul and body, justice must be done though the heavens fall. The practice of the incompetent portion of the staff must be ventilated; their blunders, whether they arise from ignorance or carelessness, must be exposed, regardless of friendly relation or social position.

If a patient is treated for abdominal tumor until he dies of a distended bladder, the Trustees must know it, and the profession must know the name of the individual guilty of such mal-practice. The cases already known are quite sufficient, if published, to drive these men, not only out of the Hospital, but out of the city. They will go like the wicked, who run when none pursue. Their hobbies exposed the individuals, too, promulgating them must also be exposed. If one cures any form of disease with raw beefsteak and whisky, and another with *cimicifuga racemosa*, and a third says nothing more is necessary in treating any kind of wound than an application of carbolic acid, their hobbies and their names must go to the professor. I am very well aware that this course will ruin the clinical feature of the Hospital as well as greatly damage medical college teaching in the city; but if there is no other way to purge the Hospital of this

vitiating secretion, and at the same time render justice to all, let the dose be given. The condition of the Hospital is very much like a business man with a tarnished credit endeavoring to sustain himself by paying an exorbitant interest. Better for the business man, and better for the Hospital, to break up and then commence again on a wiser and better basis, than in this way to go on until hopeless ruin overtakes them.

In conclusion, let me say to you, that peace is desirable only on the basis of justice and equality, and until that time I hope you will continue to cry aloud and spare not. I desire to see the time in Cincinnati when any distinguished member of the profession from abroad, such as Louis Bauer, may be invited to visit the city without being insulted by this arrogant Miami clique. The tendency of the times is in that direction. The world not only moves, but it advances in the direction of justice.

RANDOM.

HILLGROVE, DARK CO., O., May 3, 1871.

PROF. THACKER—DEAR SIR: Have you reference to ———, in your editorial of April No. of REPERTORY, who made application to the Cincinnati College for graduation and was refused, then applied to the Miami and received the degree? The editorial exactly suits his case. We, who labored long and diligently for our diplomas, feel that our diplomas are not regarded as a standard of qualification, when the country is flooded by the merest pretenders from the Miami College selling diplomas to men not qualified, and who never attended a single course at their institution. Truly thine,

J. F. DeBRA, M. D.

JONES' STATION, O., May 19, 1871.

PROF. THACKER—DEAR SIR: In the Cincinnati Commercial of the 18th inst. I find an anonymous communication denouncing the late action of the Board of Trustees at the Cincinnati Hospital, by which the faculties of all medical colleges are to be excluded from the staff of that institution after the first of October next. The action of the Board is pronounced unjust, arrogant and stupid. The article referred to, says: "But it has been done. It is, therefore, a deliberate infiction of wrong and indignity upon some thirty or more reputable and experienced medical gentlemen of this city, and prospectively on all others who may have the audacity to aspire to a place in a medical college hereafter."

I desire to say to this aggrieved writer, and also to his friends who doubtless compose the monopoly that has for several years controlled the Cincinnati Hospital as far as possible in the interest of the Miami Medical College, that the action of the Trustees of the Hospital for a long time past has been "gross injustice" to not only thirty reputable and experienced medical gentlemen, but to hundreds of them; and to all who have any interest in the success of the Medical College of Ohio, and the Cincinnati College of Medicine and Surgery—more especially the latter.

I desire also to say to him and them that they alone are responsible for the late order which practically drives them out of the hospital staff. Had they been content with a just representation on the staff, and suffered the other colleges to have a like representation there, I feel

very certain the late order excluding them would never have been adopted, and probably would never have been thought of. I took occasion to say to some of the most prominent friends of the Miami College, during the meeting of the Ohio State Medical Society, at Delaware, near three years ago, that I had often, as opportunity presented, called attention to the wrong inflicted on the other colleges by their arbitrary course, and appealed to them for something which at least approached equality, without the least encouragement that in the future there would be any concessions. Seeing how indisposed they were to deal justly, I began to look about for some means of defense, and after one year's patient effort, succeeded in organizing the Cincinnati Medical Journal Association, which at once commenced the publication of the CINCINNATI MEDICAL REPERTORY, copies of the sixth number of which I carried with me and distributed in person to the members of the society there. I then and there again made another appeal to them for justice, hoping in this way to avoid the acrimonious controversy that must follow their refusal. This appeal was also without effect. I then said to Prof. Mussy that they had friends on that staff who were too great a weight for them to carry, and that the controversy would go on until justice was done—until we were admitted or they driven out of the staff.

I desire, also, further to state to him and them, that I am entirely satisfied with the late action by which all faculties are excluded from the hospital staff; yet, granting that he is sincere and correct in his statements, I will go along with him to the Legislature, at its next session, and with all my heart I will unite with him in procuring the passage of a law that will compel this "stupid" Board of Trustees to admit on the Hospital staff a like number from each one of the Medical College faculties, so that justice may be done to the "thirty or more experienced medical gentlemen" as well as those who may have the audacity to aspire to a place in a medical college hereafter.

In conclusion, in justice to others, I must say that my friends, since the organization of the Journal Association, have united most heartily with me in this effort for equality of representation on the Hospital staff, and some of them have rendered much more effective service.

They will go to the Legislature as a unit on any plan that will promise this equality. And as the writer spurs the heel of his communication with the declaration that he has no private grievances to avenge, but, in common with others, feels a deep interest in the success of the Hospital and the Medical Colleges of the city, and promises his best efforts in their behalf, I feel sure he will not withhold his support in behalf of a proposition at once so just and reasonable.

Respectfully,

R. C. S. REED.

CHLOROFORM IN THE TREATMENT OF BILIARY CALCULI.—John Barclay, M. D., Physician to the Leicester Infirmary, recently gave to a clergyman, aged 58, in his third attack from gall-stones, chloroform, in two or three-drop doses, three or four times a day, and, to his surprise, pain, tenderness, distension, and jaundice, disappeared together.—*British Medical Journal*.

Book Notices.

CHEMISTRY: General, Medical and Pharmaceutical, including the Chemistry of the U. S. Pharmacopœia. A Manual on the General Principles of the Science, and their applications to Medicine and Pharmacy. By JOHN ATTFIELD, P. H. D., F. C. S. From the second and enlarged English edition. 1871. Philadelphia: H. C. Lea. Cincinnati: R. Clarke & Co. 12mo. pp. 552.

This is decidedly the best work on Chemistry for medical students with which we have ever met; and when we assert this, we wish to be understood as meaning precisely what we say. There are many excellent works upon chemistry, but very few if any of them have been prepared with special reference to the wants of the medical student; but this one has, and it is that which constitutes its excellency. We would expect that it would be used in our medical colleges as a textbook to the exclusion of all others.

THE CAUSATION, COURSE AND TREATMENT OF REFLEX INSANITY IN WOMEN. By HORATIO ROBINSON STORER, M. D., L. L. B. Boston: Lee & Shepherd. Cincinnati: R. Clarke & Co. 16mo. pp. 236.

This monogram was communicated to the American Medical Association in 1865, and was printed in its Transactions for that year. It is now printed in a separate form for those physicians who have desired it for their book shelves.

Dr. Storer takes the ground—1. That in women mental disease is often, perhaps generally, dependent upon functional or organic disturbance of the reproductive system; 2. That in women the access or exacerbation of mental disease is usually coincident with the catamenial establishment, its periodical access, temporary suppression, or final cessation; and, therefore—3. That the rational and successful treatment of mental disease in women must be based upon the preceding theories.

The work exhibits much research and thought on the part of the author, and is deserving of careful study by every physician.

Editorial.

THE CINCINNATI HOSPITAL FREED FROM PARTISAN INFLUENCE.

All the Medical Colleges placed on an equal footing as regards the advantages of the Hospital. Overthrow of the Miami Clique. Murphy & Co. furious and rampant!

We experience this month an unexpected gratification; namely, the very great gratification of informing our readers that, since our last issue, the Cincinnati Hospital has been redeemed from clique influence—that it is now free to pro-

ceed with its work as an eleemosynary and educational institution—that it is no longer to be compelled to carry along a clique of men who, if they had had nothing but their own merits to help them on, would long ago have sunken into contempt. Indications have been multiplying for some time that this liberation of the Hospital from its thralldom was approaching, but we confess that it came sooner than we expected. Let every upright physician of Cincinnati, and within the radius of its influence, rejoice; for a good thing has been accom-

plished—a most shameless clique have been routed from their stronghold, and have been kicked into the open air and light of day to rot and disappear.

Along the first of last month the Board of Directors of the Cincinnati Hospital becoming convinced that the monopoly of the institution by the Miami clique was a gross injustice to the medical colleges, detrimental to the educational interests of the city, and an outrage on the poor patients who have been having incompetent physicians inflicted upon them, merely because they were members of a particular clique, concluded, very properly, to remedy the evil at a stroke; and, therefore, without any warning of their intention, directed a notice to be served on the staff, that all members engaged in medical college teaching should vacate their positions on the staff, by or before October 1st; that is, before the fall and winter term of Lectures would commence. By this commendable action of the Board, it has finally been brought about what the *REPERTORY*, with the best men of the city, has been laboring for; namely, placing all the medical colleges of the city on an equal footing, as respects the clinical advantages afforded by the city, and consequently doing away with the favoritism that has heretofore been existing. Colleges whose faculties possess so little ability and learning that they cannot compete with other schools except by robbing the latter and appropriating to themselves advantages that belong to all alike ought not to exist, and the sooner they come to an end the better. Such are a fraud on the community, and it is wrong to foster in them an existence to which they have no right.

The misgivings which the *Miamis* undoubtedly had of their ability to succeed on their own merits unaided by monopolizing the common advantages, was the cause certainly of their not vacating the rights of the other schools, and bringing themselves upon an equal footing in respect to the public

clinics, when they could see with half an eye, as we have again and again intimated, that unless they did it of their own accord, it would be done for them by force. If they had had confidence that they could sustain themselves by an honorable competition, it is presumable that, seeing the time was near at hand when the peculiar advantages they were enjoying would be taken away from them, they would have said to their brethren of the other schools: "Come now, we want no discriminations made in our favor; we will yield to you your rights, and enjoy with you the public advantages on the same terms"—and have obtained for themselves an *acclat* for magnanimity, whether they deserved it or not. Even as it was, since trickery is in their line, we think they missed improving an opportunity which, if embraced, would have redounded to their credit. But they wished to stave off the evil day when they would be left to their own resources, and so thought if it could only be protracted an hour it would be a gain.

Some of the advantages brought about by this very praiseworthy action of the Trustees, are:

1. Justice is done all the medical colleges by placing them on an equal footing as regards the public clinics to which they all have an equal claim—the building up of one institution at the expense of the others is done away with.

2. The members of the staff, freed from medical college teaching, will have more time to attend to clinical instruction and to the relief of the suffering poor under their charge. That a physician, young or old, carefully discharge his hospital duty who is employed much of his time in didactic teaching is simply not—more or less neglect must follow, and more or less inhumanity result to the suffering inmates.

3. Great benefit will result to the Hospital as an educational institution—freed from partizanship, it will be neutral ground, and all the colleges can unite in advancing its interests. All efforts to injure it be endeavoring to get students to pat-

ronize the clinics of some of the private hospitals, as we understand the Miami propose to do—for it is rule or ruin with them—will be a failure. No private hospital can compete with the Cincinnati Hospital in its clinical advantages if due efforts be made to advance them, and medical students can not be made to believe otherwise, no difference what school they may be in attendance upon.

4. Incompetent men will be gotten rid of. It is a well-known fact that there are and have been members of the staff possessing no higher qualifications than being members of a particular college faculty. There will be no necessity in the future of retaining men on the staff for that reason. And, as the new rule of the Trustees contemplates a re-election every year, there will be a good prospect of always having a first-class staff. Heretofore a second or third-rate man, even when not kept in his place by college backing, could only be gotten rid of by expulsion or by getting his friends to prevail upon him to resign, or by *promoting him to an honorary position*. (It is scarcely necessary for us to say that we do not mean to insinuate that such men as Dr. Blackman are second or third rate men. Every one knows his promotion was to prevent his entire severance from the Hospital voluntarily.) As can be easily perceived, there was no little trouble attending the displacement of a staff member disposed to hold his place; but, in the future, it will need only not to re-elect an inferior man when, at the end of the year, a new staff is formed, it is desirable to dispense with his services and secure an abler one. He is then not expelled, but merely failed of a re-election.

5. Students will have an opportunity of hearing more than one class of men upon the practical points of the profession, which will be a gain to them as much so as reading different authors upon subjects that do not involve pure science, and upon which all do not have the same opinions. An infusion of a due amount of skepticism

into views that are not positively demonstrable is necessary to stimulate investigation, and this is best done by listening to the teaching of different men. Besides, a clinical lecture will not be made valueless to four-fifths of the auditors by its being made to illustrate some pretended didactic lecture to one-fifth. The Miami faculty have been in the habit of alluring students to their school by assuring them that their clinical lectures would be made to illustrate their didactic lectures largely—this sham and fraud will be done away with.

But our space this month is too limited to discuss at length the benefits that will accrue to the Hospital by the adoption by the Trustees of their new rule. At some other time we will recur to the subject. But not only to the Hospital, but also to the colleges, except the Miami College, will the rule be most advantageous. They will hereafter be on an equal footing as regards the common advantages, and their rivalry, in time to come, will be to excel one another in a legitimate way, by improving their faculties by weeding out incompetent men. We have no doubt the Trustees of the Hospital will receive the heartfelt thanks of every fair minded man in the profession who loves its peace and harmony and advancement. They have already commenced to receive the abuse of the Miami men for their very praiseworthy course—most scurrilously abusive articles of them appearing in the *Cincinnati Commercial* of May 18th and 25th, written by a member of the Miami party; but they have nothing to fear from a decaying clique. Murphy's gang may threaten to "handle them without gloves," (we quote from one of the articles in the *Commercial*); but their hands have grown weak and palsied, and can harm no one.

Says the abusive Hibernian in the *Commercial*, complaining of the expulsion of the Miami men from the staff: "It is therefore a deliberate infliction of wrong and indignity upon some thirty or more reputable and experienced medical

gentlemen of this city." [How thirty or more, when only the members of the Miami faculty and two Ohio professors are affected?] Such an expression could only emanate from a class of men who had been indulged in their injustice to others and shameless monopoly of common rights, until they had gotten to really believe that no one outside of themselves had any rights. We have before said that the Miamis had come to consider that the Hospital was their private property, and the expression proves the assertion. Forsooth, a college that has revelled in the advantages of a large public charitable institution for years, to the detriment of other schools, and has boasted of its superiority in this respect in its circulars, which it has scattered broadcast over the land, and in its advertisements, and in its newspaper puffs, which it has bought, complains of a "deliberate infliction of wrong" when it is routed out of its monopoly, and forced on an equal footing with its competitors! But their pitiable condition makes their unblushing arrogance ludicrous.

Again says the former lickspittle, but now villifier of the Board: "Assume we have personal interests involved. Does that invalidate our right to protest against this unnecessary, and therefore wanton and shameless wrong and indignity recently perpetrated by the Hospital Trustees, through which those interests will be seriously damaged, if not destroyed? If they can not protest against this outrage upon their rights and interests, which are alone assailed, and demand its revocation, without their motives being impugned, who can?" But how did the Miami school come to have rights in the Hospital above others, for it is certainly no common rights this Miami man is complaining of being cut off, but the rights above others. The Cincinnati College of Medicine and Surgery never had any representation on the Hospital staff, the Ohio College only a meagre one, while the Miami College has been enjoying these many years the al-

most exclusive monopoly, and yet this Miami writer never uttered a wail about the injustice of the Board in their exclusion of the other schools; but, on the contrary, with all of his colleagues, has been parading them before the public as objects of admiration—as men who done all things well, so that the rights of which he complains as having been violated in a "shameless" manner, must be the "rights above others," and where, we ask, did the Miami College get them? Our friend, your cause is a bad one. To unblushingly advocate that you have rights in public property, which persons of the same position and as large tax payers as you are, can only excite disgust and ridicule. If you wish to obtain sympathy, you must show that you have been injured in your common rights—in those which belonged to others as well as to you. But how can you expect to do that with any hope of commanding respect, you who have been trampling unrelentingly upon the rights of others for years. Grant that the Hospital staff should be made up of the college faculties, it then follows that they all should have an equal representation. Did the Miamis advocate it during the last several years? By no means on the other hand, they have at all times stigmatized as disturbers of the peace and villifiers all who have complained of the unequal representation which has existed, and apologized for the Board in continuing it. Protestations on the part of the faculty of the Cincinnati College, because they were entirely excluded, have been met with the response that the Board of Trustees "did not know colleges in the appointments to the staff;" but when they offered to publicly concur for the positions, and a proposition to that effect was submitted by the Board to the staff, every Miami professor voted against it.

Grant, we say, that the Hospital staff should be selected from the college faculties, yet the Miami faculty are not the ones to rebuke the Board for excluding all those engaged in college teaching. Mor-

ality should be preached, but it should be preached by those who lead pure lives, not by those who have time and again been convicted of high crimes and misdemeanors. It ill becomes those to endeavor to excite a furor against outside parties for wrong-doing when they themselves have been trampling the rights of their brethren under their feet all their lives—permitting no appeal to their feelings of fairness to affect them. It is well known that the Miamis could at any time have had all the schools equally represented with themselves on the staff of the Hospital if they had desired it—for the different Boards, in times past, have been their creatures—but destitute of all feelings of honor, and guided only by their selfishness, they sought to build themselves up by depriving others of, and monopolizing to themselves, the common advantages that belonged to all alike. Having lost their own "rights" as the result of their efforts to keep other schools out of theirs, they will get no sympathy in stigmatizing the recent act of the Board as "unjust," "shameless," "an outrage," etc.

DEATH OF DR. J. G. WILLIS.—This gentleman, who has been lecturing for several sessions in the Cincinnati College of Medicine and Surgery, on Dentistry, died very suddenly about noon, May 23rd, of fatty degeneration of the heart. During the whole of the morning of the day of his decease he was employed at his business.

He was a good lecturer and was generally esteemed. The faculty held a meeting and passed resolutions expressive of the esteem in which they held deceased. The resolutions have been unavoidably crowded out this month, but will appear at another time.

CREDIT TO WHOM CREDIT IS DUE.—In our last issue we mentioned the fact that if it had not been for the exertions of DR. R. R. McILVAINE, and the HON. W. M. CORRY, the lot on which the Cincinnati Hospital now stands would have been sold several years ago, and

instead of the splendid, new building now occupying it, we would still have the rickety old Commercial Hospital building. Notwithstanding that it is owed to Dr. McIlvaine and Mr. Corry the palatial edifice on Twelfth street, yet the day it was inaugurated neither one was included among the invited guests, but among those officiating actively on the day of ceremony was Dr. John A. Murphy, etc. What blasphemy!

We here quote a short article from the *Commoner* of this city, edited by the Hon. W. M. Corry, of date of May 15, 1869, entitled, "The New Hospital." It gives a few interesting historical facts:

THE NEW HOSPITAL.

The *LANCET* for April, gives its readers an engraving of this splendid new building at the corner of Twelfth street and Central Avenue. There is nothing superior to it in the United States, for convenience and elegance. A few months ago it was opened for patients, and several speeches were made by the Mayor and others, in which a great deal was said of the past and future. One very interesting fact was omitted, however, which is brought out in this number of the *LANCET* by Dr. McILVAINE. It ought to be made known to the general public as well as to the medical profession. The fact is that but for the Doctor's exertions, at a certain period, there would have been no inauguration, because there would have been no building nor any hospital lot. He, and those who helped him, deserve to be remembered although they were not included among the invited guests, and did not appear on the great day of ceremony.

According to the Doctor's statement the old hospital before 1855, was considered a disgrace to the whole city, and as early as January of that year covetous eyes were turned to the ample lot, and hence, advocates sprung up who talked of removing the hospital to the country. They had a proposition put through Council, to cut it up, and offer the Central avenue front of 400 feet or more by 90 feet deep; for sale on time. No sooner said, than done. Committee agreed to it in February, and so reported to Council, and from March 28, to April 6, 1855, the front was sold in lots for about seventy thousand dollars. The Council assumed to have absolute power over the subject, and nobody was willing to resist. The city Infirmary declined doing anything, and so did the deans of both the Ohio and the Miami Medical Colleges, although the trustees of the Ohio college claimed the exclusive control of the hospital. Dr. McILVAINE states that about that time, they paid Dr. TOM O. EDWARDS, a leader in the City Council, \$378 for expenses in the lobby at Columbus, to get their terms of office extended to ten years. Dr. McILVAINE went to the Capital at his own charge to endeavor to save the lot, and he succeeded. We well remember his arrival there, and being ourselves a representative from Cincinnati, we

responded at once to his purpose. March 20, we offered a preamble and resolution setting out that the hospital lot had been bought by the State and City jointly, for that purpose and none other, but that the City Council, assuming complete ownership, was about to sell it out for shops and other private business, contrary to law;—that Mr. KIMBALL, the new Attorney General, should examine the facts at Cincinnati, and make an immediate report to us on the law also, so that proper information might be placed in possession of the General Assembly. These were passed unanimously, and the Attorney General investigated the subject at once, and gave in his report that the City Council had no exclusive right to the hospital lot, and that the sales were void. The purchasers, no doubt, took the advice of eminent counsel, but they got no encouragement, and the lot was suffered to go back to the owners, and to the uses and purposes for which it was bought, and to which it was first dedicated in 1821. We well recollect that after the sale, a part of the premises were occupied by some stone cutter, and that the whole line of fence on Central avenue where now stands the *OSSEAUX DE RUSSIE* of the grand new hospital, was all torn away. It was a miracle that the lot was saved by the energy of two or three persons, foremost of whom was Dr. ROBERT R. McILVAINE, who set the others in motion. We saw then, in 1856, the rising tide of corruption in the Legislature, and that such was the love of money, and such the perfidy of legislators, that resolute hands, or stealthy, according to the case, were being laid upon every piece of property that could be grasped. The school and ministerial sections of many of the townships in Simmes' Purchase were the most helpless victims, and the favorite rascality of members was to get an act passed so as to buy up the fee upon the basis of the rental fixed many years before.

If public servants then, had been as well educated as they are now to the plunder system, Dr. McILVAINE's energy and good will in saving the hospital lot, would have been all ineffectual. As the case stands, and as the magnificent hospital building now stands, where all the functionaries of the city, both legal and medical, consented to place a paltry row of shops, it is fit and proper that the Doctor should have related the facts of his own active and successful agency in frustrating the spoilers. He was, logically, better entitled to his place in the inauguration ceremonies, than the Mayor himself. We quote his concluding sentence as being far more applicable to himself than to us, and with that difference, we cheerfully endorse it: "It will be recalled with interest, that it was owing to the disinterested promptness of Mr. CONAR, that the hospital lot was preserved, and the designs of parties having an eye to its unholy diversion, frustrated, entitling him to the thanks of the profession, and the gratitude of the unfortunate for all time."

JOURNALS RECEIVED.—We are in receipt of the January number, 71. *Half-Yearly Compendium of Medical Sciences*. Unavoidable delay attended its issue. The *Compendium* is the only *Half-Yearly* publication in this country, and is

unexcelled by any of those published in other countries. The present number is a particularly good one. Published by Dr. S. W. Butler, Philadelphia, at \$3 per annum.

We have also on our table the *American Journal of Obstetrics and Diseases of Woman and Children*, for May. It has changed publishers and is now issued by Wm. Baldwin & Co., of New York. It is undoubtedly the best journal published in the department of medical literature to which it is devoted, and should be taken by every physician. Each number contains 192 pages. Published quarterly, at \$5 a year.

The *American Journal of Medical Sciences* and *Rankin's Half-Yearly Abstract* are both standard journals, with which our readers are well acquainted—the former being published quarterly, and the latter, as its name indicates, half-yearly by Henry C. Lea, Philadelphia. The *American Journal* has no superior in the world, and every American can well feel proud of it as exhibiting in its articles learning and ability, which will compare favorably with that shown in the leading journals of other countries. Price of the two together, with the *Medical News & Library*, monthly of 32 pages, \$6.

The *New Orleans Journal of Medicine* is also received regularly. It is a quarterly, and compares favorably with the best. Its articles are all of a high order; in fact, no journal has more thoughtful and learned contributors. Physicians of the North would do well to take it. Dr. W. S. Mitchell editor and proprietor. Price \$5.

Oliver Optic's Magazine, issued every month, is the largest handsomest and best juvenile magazine published. Its reading matter comprises stories, sketches, poems, games, puzzles, dialogues, &c. Published at Boston by Lee & Shepard, at \$2 50.

NOTICE.—We send bills in this number to some of our subscribers who have neglected paying for 1871; we hope they will respond once.

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No. 7

A PARTIAL REPORT ON OTOTOLOGY.

Read before the Academy of Medicine by the Chairman of the Ophthalmological and Otological Section, PROFESSOR SEELY, of the Medical College of Ohio.

On a previous occasion I had the pleasure of calling your attention to a few of the advances made of late years in aural surgery, with a notice of cases.

It is not my purpose this evening to make a general report in this department, but will simply use a few cases as a basis of some remarks in therapeutics, and to still further call attention to the close union of what is called the "special" with the general practice. Each year adds interest to the noble science and art that are our calling; each year, with its new triumphs, inspires us with new zeal.

The first case I desire to call your attention to is that of a young man admitted into my ward, in the Cincinnati Hospital, with an enormous swelling upon the right side in front of the ear, in the temporal region, with great cedema of the eyelids upon the same side.

The previous history was one of otorrhea in childhood, and a week or more before his admission, he had a sub-acute attack of inflammation in the middle ear, and for the relief of the pain a poultice had been prescribed.

There was only a slight purulent discharge, and no affection of the bones in front of the ear, as the entire absence of all pain on pressure indicated.

On this diagnosis I made an opening as far in the swelled meatus as possible, upwards and inwards, through which all the matter escaped in a few days, and the patient left the ward.

REMARKS.

I think all aurists are now quite of Trœltzsch's and Schwartz's opinion that poultices of all kinds are dangerous things in aural inflammations, as well as in ocular; not that the pains are not speedily and surely relieved, but that they are so liable to set up complications, such as the abscess I have described, perforation of the membrana tympani, inflammation in the mastoid cells, etc.

Schwartz goes so far as not to use them in furuncles in the ear, and my own practice has afforded me two examples—one of a diffuse inflammation of the external auditory meatus and thickening of the drumhead; the other of perforation of this membrane, and discharge from the drum of the ear, from the use of poultices for furuncle.

All these complications may be avoided, and fully as much relief afforded the patient by simply filling the ear with hot water, or a hot morphia and atropia solution, and I would particularly call your attention to solutions of the latter. If a furuncle is forming in the ear, of course *the first thing to be done, as soon as a well marked tender spot or even tender region is found, is to make an incision through this tender spot or region*, then apply the hot water or the hot atropia solution.

The second case is one of extraordinary interest alike to all.

I'll give an abstract of the history, prepared by Dr. Vinnedge, the house physician.

Robert Hackett, æt. 45, Irish, painter, admitted into the Cincinnati Hospital October 24, 1868. No history of phthisis in family; has had more or less otorrhea in left ear since childhood; has been an epileptic for fifteen years.

The wife states that he generally complained of great pain in the ear as a prodroma to the convulsion.

Has had lead colic for the last six years, wrist drop, etc.; more or less cough for eight years; some expectoration of blood—lost forty pounds during last year. On admission, the record says, he was a tall, slender man, much emaciated; some incurvation of finger nails, ends not clubbed, Thompson's line not marked; pulse, 122; temperature, 103; respiration, 38.

Then follows an enumeration of the various rational and physical signs of a patient far gone with tubercular trouble.

On November 2d facial paralysis made its appearance. On November 21st my attention was called to the case on account of the eye complication, and the record says, "the membrana tympani on the left side destroyed, and with it the small bones; the malleus somewhat eroded, being found in the meatus and removed by Dr. Seely; denudation of the bony canal and cavity of the tympanum; extensive necrosis."

The patient was transferred to my ward, where, after sinking rapidly, he died on the 26th. While making an examination of the eye, my attention was attracted to the ear by the offensive odor of the discharge on the side on which the facial paralysis existed, and it struck me that in this ear trouble we might have a key to the difficulties.

Certainly the post mortem findings corroborated my opinion; and we have in the case a terrible illustration of what may result from a *neglected* otorrhea.

And whatever view may be taken as to the ultimate cause of death, certainly there can be but one as to the connection between the epilepsy and the ear trouble.

*Secio Cadaveris, made by Prof. Bartholow, pathologist of the
Hospital, November 29.*

Little post-mortem rigidity, great emaciation, numerous cicatrices, very irregular on left side of forehead, left upper lip and left side of head; scalp very dry, free from sub-cutaneous fat; dura mater healthy; superior arachnoid space distended with clear serum; extravasated blood over surface of both hemispheres, especially on left; infection of fine vessels of pia mater, and an increase in size of the larger venous trunks.

A good deal of clear serum in subarachnoid space; some cloudy opacity of arachnoid on posterior portion of right hemisphere and posterior lateral portion of left.

Puncta vasculosa of central white matter not more numerous than usual. Left lateral ventricle considerably larger than right, especially the posterior cornua (probably distended with fluid, which escaped through the anterior perforated space).

Septum lucidum intact; choroid plexus more voluminous on left side than on right; cysts found on both, more on right; pineal gland quite large, and contains calcareous masses in the

interior, large, yellowish, soft in consistence; middle commissure of brain decidedly injected.

Third ventricle widened both in longitudinal and transverse diameter; dura mater reddened and injected over petrous portion of left temporal bone, and covered with a layer of false membrane and pus; pus had dissected its way into sella turcica, and a small collection was found posterior to and beneath the pituitary gland; internal ear was far advanced in disease.

Bones necrosed, the disease involving, to a greater or less extent, the petrous portion of temporal; the portio dura and mollis of the seventh pair were neither apparently altered in structure at the point of emergence, but were both disorganized after their entrance into the petrous portion.

REMARKS.

Schröder von der Kolk's explanation of the production of epilepsy is increase of blood in the medulla oblongata. Niemeyer says, convulsions similar to epileptic may be produced by the induction apparatus, irritating the base of the brain. Brown-Sequard says, hardly is there any affection that can not be considered as having sometimes been produced by a reflex action, the cause of which is an injury, a disease, or at least an irritation of a nerve. In speaking of epilepsy, he says, of all the nervous complaints that may be due to an irritation starting from the trunk, branches, or ultimate ramifications of nerves none excepting the various forms of paralysis is more frequent than epilepsy.

Diseases of the mucous membranes, their irritation by worms diseases of the cerebral meninges, irritation of the dental nerves, etc., are known to be frequent causes of this convulsive affection.

Niemeyer also speaks of neuromata, cicatrices, or tumor pressing on the peripheric nerves, producing epilepsy.

We certainly, for a series of years, had in this an irritation of the base of the brain and its meninges sufficient to account for the epileptic state. I need not remind you how frequently in early life we have not only brain symptoms but serious lesions of this organ, often producing death arising from inflammation of the middle ear.

Dr. Bartholow has kindly given me a few notes of a case 1

was called to in consultation, and I afterwards had the facts from the father. A child, when one year old, had a convulsion, followed by a profuse otorrhea, then recovery ensued.

After an interval of six months, during which period the child's health was apparently excellent, ear troubles again occurred; some otorrhea took place; the child was feverish and teething, and a convulsion again occurred. This was followed by prolonged stupor, dilatation of pupils, diarrhoea, vomiting, etc. After an illness of four weeks the child recovered under the influence of food and stimulants.

The history of the case so briefly given, in my mind, pointed clearly to the ear as the seat of the trouble—an *inflammation of the middle ear, with congestion of the meninges and brain*. Recall the close relation of the parts in early life, especially the roof of the tympanum. We have this roof varying very much in different subjects. Tröeltsch calls attention to the fact that it is frequently not a dense, compact structure, but composed of smaller and larger cells; and is oftentimes so thin as to be translucent, and may even contain variously sized perforations, which may readily be mistaken for losses of substance produced by caries.

Remember, the dura mater covers this bone, and you will have sufficient facts for directing your attention to the possible results of an inflammation in the middle ear. Again: we have the petro-squamosal fissure, through which, in infants, the dura mater sends a very vascular process into the cavity of the tympanum, and along which, even in adults, a number of fine vessels, branches of the middle meningeal artery, pass from the dura mater to the middle ear.

This close connection explains many of the cerebral symptoms complicating troubles of the middle ear. I shall take the case just narrated, and one or two more to be mentioned as a provocation to remind you of the necessity of giving increased attention to ear affections occurring in early life. A large portion of ear cases to which my attention is called are the results of neglected acute or chronic inflammations, so called neuralgias, or, if recognized, made light of. So convinced am I of the importance of giving attention to every complaint made by children of earache, and especially to discharges from the ears, that I do not hesitate to regard a man as not only careless but even culpable who neglects it.

Only recently I had a little patient, four months old, with otorrhea, the irritation from which produced a perfect quotidian neuralgia. I put it upon quinia, which in two or three days stopped its five o'clock crying, then gave it the iodide of iron, and kept the ear cleansed with salt and water, which caused the discharge to cease, and allowed the little perforation to heal. I have had several cases, at the Medical College of Ohio Dispensary, of otorrheas in very young children. It is astonishing how frequently ear diseases occur in very early life. Earaches almost always arise from inflammations of the external or middle ear.

When I look over the history of the otorrheas that come under my care, I find the greater part have begun in infancy or early childhood. I am surprised continually by finding evidences of previous inflammation, either in the shape of perforations, or appearances indicative of pre-existing perforations. I am frequently asked the question, do perforations heal? It is a very common occurrence in early life for perforations to heal, and no one who has made an intelligent examination of many ears in children has failed to find unmistakable evidences of previous perforations. Nor has any one who has treated any considerable number of cases failed to see a healing of perforations. So, too, such a result is not rare in adults.

Any one who has attempted to establish a perforation through the drumhead, and found the difficulties attending such an attempt, will be quite ready to affirm that perforations may heal even when the circumstances are not the most favorable.

I have good illustration in a man of forty-five, whom I recently examined, attacked with sub-acute inflammation of the middle ear, attended with a good deal of pain, and where an examination revealed pulsations, pretty reliable evidence in itself of perforation, and in which, after the ear was cleansed, the small perforation in the lower and outer portion of the membrane was distinctly seen. It is now healed.

I have in my case book a number of examples of double and triple perforations which Politzer says are so rare.

At some future time I hope to be able to give a more extended report upon the necessity of the early recognition of ear trouble and the therapeutics, especially in ear troubles complicating or resulting from scarlet fever, measles, etc.

THE DIAGNOSIS AND PROGNOSIS OF PULMONARY TUBERCULOSIS.

By A. P. DUTCHER, M. D., of Cleveland, Ohio.

I.—DIAGNOSIS OF PHTHISIS PULMONALIS.

In the early stage of this disease the diagnosis is sometimes very difficult, but as it advances to the second or third stage, when cavities have formed in the lungs, it is commonly more pronounced. If we regard pulmonary tuberculosis merely as a local disease, its physical signs will frequently be wanting, because the local lesions are formed very slowly, and often so slightly at the commencement as to produce very little obstruction to the functions of the lungs. But if the disease in the lungs be regarded in the light merely as a part, and, as it were, a sign of a great constitutional disorder, our diagnosis will be greatly facilitated.

Physicians frequently err in examining cases of this kind, by directing their attention exclusively to detecting those symptoms and physical signs that belong to the last stage of the malady. But we consider these of secondary importance to those numerous and earlier phenomena gathered from an accurate history of the case, all of which should be examined with the greatest care, that their true value may be positively known. The general symptoms of the disorder are easily interpreted, but a correct knowledge of the nice shades of auscultation and percussion, in the first stage of this disease, can only be acquired by long and persevering practice.

It can not, therefore, be denied that it is far more useful, in a practical point of view, to be able to detect the first indications of pulmonary tuberculosis, than to describe the various physical signs resulting from a cavity in the lungs; far more important and useful to be able to interpret correctly the value of the frothy expectoration, than to multiply experiments for the purpose of discovering the presence of pus. We should not forget to remember that there is no symptom which absolutely constitutes a disease, nor any one physical sign which is invariably present. Our diagnosis, as already remarked in another place, must be deduced from all the symptoms which are presented to

our inspection, and their just estimation founded upon an accurate knowledge of the nature of the malady.

In the first stage of pulmonary tuberculosis, the diagnosis is formed in part by way of exclusion; that is, many of the symptoms acquire their value from the absence of any apparent lesion which is capable of producing them. If they occur in young persons, especially if from age or habits of life they are exposed to the disease, the probability of its development is of course enhanced, and the diagnosis is more obvious. But when the constitutional malady has made some progress, and the case has become chronic, the general symptoms are emaciation, often accompanied by a good appetite, a changed color of the skin, which seems dusky or earthy in its hue, rounding of the extremities of the fingers, incurvation of the nails, Thompson's gingival margin, the bluish tint of the sclerotica, and the occasional flush of the cheek, are all regarded as marked symptoms of the disease; but as diagnostic signs, they are not of much value, for they are often met with in other disorders of a wasting character.

In the more acute form of the disease the general symptoms are more active in their character; the fever is higher, and for the most part continued with a jerking pulse; the fever commonly continues throughout the whole twenty-four hours, but is more severe in the after part of the day than at other times, and at night is apt to terminate in profuse perspiration. Chills are rarely present in the first stage of the disease; in this respect the formative fever of pulmonary tuberculosis differs from the hectic of the latter stage of it. In this instance it will sometimes continue for several days without intermission, and then be absent for an equal number; and it is a diagnostic mark of hectic as it occurs in this disorder, that during the most intense and protracted paroxysms of fever the mind is uniformly clear, and the head free from pain.

The last means of diagnosis by the general symptoms of pulmonary tuberculosis is the existence of certain affections which are closely connected with the disease. These are the inflammations and the tubercular infiltrations of other organs than the lungs, such as the small intestines and the serous membranes of the abdomen. When these are present they often explain the nature of the disease in the lungs, and are sufficient to distin-

guish it from ordinary inflammation. It is not unfrequently the case that we see individuals suffer for months with chronic diarrhea before the lung difficulty will manifest itself. Sometimes the lung will become affected first, and appear to be the only part disordered, when all of a sudden the bowels will become deranged and supercede the lung affection, and the patient die with chronic tubercular diarrhea. But the connection between these various complications will be easily made out if we pay particular attention to the leading features which characterize this complicated and fatal malady.

Although we place great reliance on the physical signs as a means of diagnosis in pulmonary tuberculosis, yet they are not always to be taken without exceptions. There are lesions of the lungs which produce physical signs that may be easily mistaken for tubercular deposits and vomica; thus, in some forms of chronic bronchitis attended with dilatation of the bronchi, and where large pouches are formed, they may be the seat of *clicking* or cavernous respiration, pectoriloquy, and even the cracked pipkin sound. But, as a general thing, their situation, great extent and more stationary character will serve to distinguish them from tubercular excavations. With few exceptions they usually occupy the scapular and mammary region, and not the sub-clavian. They sometimes extend over a considerable space, but do not multiply like tubercular cavities.

Allow me just here to cite a case from my book of *MEDICAL FRAGMENTS*, which to my mind illustrates very clearly the diagnosis between bronchial dilatations or pulmonar pouches and tubercular cavities.

II.—A CASE OF PULMONARY BRONCHITIS MISTAKEN FOR PULMONARY TUBERCULOSIS.

March 22d, 1857. Called this day to see Rev. H. W., a distinguished Methodist preacher, aged 37, of a marked nervo-bilious temperament; has always led an active life, and enjoyed good health until about a year since the commencement of his present illness, which he attributes to a severe cold that he took while engaged in holding a protracted meeting. Instead of suspending his labors and calling in a physician, he continued his work until his disorder became so severe, and his strength so much exhausted that he was unable to go to his charge any more. He

now had fever, pain in the region of the sternum, cough, mucous expectoration, loss of appetite and constipation of the bowels. A physician was called in, pronounced his disease lung fever, and for two weeks he was quite ill. After the fever left him his appetite returned, his bowels became more regular, and he gained a little in strength; but his cough and expectoration remained about the same. Various remedies were now employed for the relief of these troublesome symptoms, and for six months he made but little improvement. He now called in the aid of homoeopathy, and after trying its empty pretensions for three months without benefit, he was induced by the advice of a ministerial friend to consult the lamented Dr. Lawson, of Cincinnati. The doctor saw him several times, examined his case carefully, and pronounced it phthisis pulmonalis, and gave an unfavorable prognosis. Two other medical men were consulted in the same city, and gave the same opinion.

At the time of my first visit he had just returned from Cincinnati, and felt very feeble and disponding. Hope had well nigh given him over to despair. After repeated examinations of his case I was not willing to say that he was suffering under pulmonary tuberculosis. He had, it is true, some symptoms of the disease, but they were not pronounced. The more positive symptoms were wanting. Thus the tubercular diathesis was not present; Thompson's gingival margin was absent, and there was no clubbing of the fingers, nor incurvation of the nails. He had never had hæmoptysis, nor hereditary predisposition to phthisis. He was, however, thin in flesh, had frequent pulse, a slight elevation of temperature and hurried breathing. Auscultation elicited on the right side distinct clicking at the fourth intercostal space from the spine to the sternum; there was slight dullness on percussion just under the clavicle. On the left side there was no dullness on percussion, but auscultation elicited loud mucous rhonchi. On inspecting the chest there was a slight inequality in the expansion movements of the two sides. The right side was restricted in its movements, while the left side appeared to be augmented.

The history of the case and the physical signs seemed to point out the existence of tubercular consolidation in the superior lobe of the right lung, with a considerable cavity in the middle lobe and chronic bronchitis. But they were by no means conclusi-

as to the disease being tubercular. The dullness was in the right place, but the clicking was not; for it is pretty generally conceded by our best writers on pathology that tubercular disorganization commonly commences first at the superior part of the lung, and it is at that part where cavities first form, and clicking is heard just under the clavicle, or at the second intercostal space about two inches from the sternum. The general symptoms and physical symptoms being insufficient to make out a clear diagnosis of the patient's malady, we called to our aid the microscope, which had in several instances like this helped us out of our difficulty. The sputum was, therefore, carefully and repeatedly examined. It was found to contain the usual products of purulent expectoration, mucous and pus cells in abundance, but no tubercular granules, withered cells, pulmonary fibres or meshes, all of which are necessary to make out a case of tubercular disorganization.

The case was, therefore, regarded as chiefly bronchial inflammation, attended with certain structural lesion which we will notice as we proceed, and his treatment was based upon this diagnosis.

He was ordered the following:

R. Potassii iodidi, ʒiii.
Hyd. bi-chloridi, gr. ii.
Ext. lobeliæ fluid, f ʒi.
Syrup stillingiæ comp.
Syrup phell. aquat. comp., auf. ʒviiiss. M.

Sig.—One-half ounce three times a day after each meal.

As a counter-irritant his chest was to be painted with the following every night on retiring to rest:

R. Iodine, (pure,) ʒi.
Potassii iodidi, ʒii.
Aquæ puræ, f ʒiv. M.

He was also ordered to inhale forty drops of the following every night before going to bed:

R. Iodine, (pure,) gr. xx.
Chloroform, f ʒi. M.

To quiet cough and secure rest at night, one of the following pills was ordered:

R. Quinia sulph.,
Ext. hyoscyami, aa gr. xxx.
Morphiæ sulph. gr. iv.
Fiant pill, No. 15.

These therapeutical agents, with little variation, were continued for two months, at which time he was so much improved that he took a trip to the sea shore; was gone two months; on his return he was so far restored to health that he was once more enabled to enter upon the duties of his vocation. I saw him about two years since. At that time his general health was good, but he was still troubled with shortness of breath and cough, particularly when he over-taxed himself in preaching or walking. An examination of his chest elicited dullness on percussion and clicking on auscultation in the right side, the same as years before, and will probably continue as long as he lives.

And now some may ask, how do you account for these abnormal sounds if there was no tubercular disorganization in the lung? We will try and explain. In this patient's case there had evidently been at first an acute inflammation of the bronchial mucous membrane of the larger tubes; by neglect and mismanagement it extended to the air cells, which being permanently engorged by effusion of lymph, will produce more or less consolidation of the lung—hence, dullness on percussion. Again, it sometimes occurs that inflammation, instead of obliterating the bronchial tubes and air cells, causes them to dilate. On post-mortem in cases of this kind we sometimes find the bronchial tubes supplying the whole lung or a lobe dilated. In this instance the bronchial tubes when slit open may be larger than the trunk from which they originated, and are easily exposed to the very periphery of the lung where they often terminate in a *cul de sac*. Seiveking and Jones have presented their readers with an excellent diagram of this condition of the bronchial tubes, on page 389, of their work on pathology. In other cases the tubes are abruptly enlarged at a particular point as a single tube, or several tubes near each other uniting to form an irregular cavity. This we suppose to have been the condition of the bronchial tubes in the case just given. The clicking heard was the air passing in and out of a large bronchial pouch and not by a tubercular cavity.

But some may be ready to ask, upon what physical signs we place our chief reliance in determining the existence of a tubercular cavity in the lungs. We answer *clicking*, so named by Dr. T. Thompson in *Lectures on Pulmonary Consumption*. And, notwithstanding exceptional cases may be cited, like the one just

presented, we will seldom err in pronouncing the case tubercular where this sound is constantly heard just under the clavicle and in the upper portion of the scapular space. But the physician should not make up his opinion from any single symptom or physical sign. Let every disordered manifestation be carefully examined; let the condition of every organ be faithfully investigated, and its vital condition truly marked, for it is only in this way that we can form a correct opinion of the existence of this disease or any other.

III.—PROGNOSIS OF PULMONARY TUBERCULOSIS.

In a disease which has proved so destructive to the human race as pulmonary tuberculosis, it will, as a matter of course, be supposed that the prognosis is unfavorable. The malady, however, does not always prove fatal; for it has been clearly shown by pathological research that it has been cured by natural process, and every physician of extensive experience has met with individuals who have had all the symptoms and physical signs of the disease, and not unfrequently in an advanced stage, who finally recovered, and afterward enjoyed tolerable health. I could cite several cases of this kind that have fallen under my own notice. But it should be observed that these patients, as a general thing, do not always regain their former health and physical power; they are apt to have pain in the chest, cough and dyspnoea on taking brisk exercise. But they are commonly able to attend to the ordinary duties of every-day life without suffering much inconvenience. Six years since I had under my care a man suffering with tubercular disease of the superior lobe of the left lung. I believe post-mortem would now show total disorganization of that part of the lung, yet he is considered a good hand, and works daily at the laborious business of boiler making for steam engines. For more than two years he was apparently a hopeless invalid.

After the existence of pulmonary tuberculosis has been clearly made out by the physical signs, the prognosis is to be formed principally through the general symptoms. The extent of the pulmonary lesion may, indeed, only be determined by the physical signs, such as dullness on percussion, prolonged expiratory murmur, bronchial respiration, clicking, the cracked pipkin sound, and other signs, whether they are confined to a small

or extend over a considerable portion of both lungs; in the latter case, the rapid progress of the disease to a fatal termination may at once reasonably be inferred. But where the physical signs establish the presence of the disease rather than its extent, we must refer to the state of the general health to determine the probable time during which the constitutional strength may struggle against the disease, and the chance, if there be any, that it may get rid of it.

When there is much cough and great difficulty in breathing, with copious purulent expectoration, and the pulse continually over one hundred beats per minute, temperature over one hundred degrees continually, night sweats, diarrhea, the loss of strength and flesh considerable and progressing, very little if any hope can be entertained with regard to a favorable termination of the disease, and it will probably end in a short time. In some cases that I have seen, where there was great difficulty in breathing from the commencement, death took place before emaciation was extreme, and this is generally the case in the acute form of the disease, where the fatal termination is caused by pneumonitis or hemorrhage of the lungs. In such instances, the feet, face, and other parts, sometimes become cedematous before death. But in those cases where the progress of the disorder is not so rapid, the emaciation is very great. In the very last stage of the disease, the expectoration is frequently changed to a dark, dirty green, surrounded by a pinkish halo. This is a most fatal sign. When this kind of expectoration makes its appearance, death will occur in a few days. Shortly before death the expectoration is sometimes altogether suppressed.

In some of the more prolonged cases, the progress of the disease is nearly uniform; it is at first characterized by a series of attacks of increased symptoms, with temporary amendment between them. This is generally referred to the weather, increased exertions, and under favorable circumstances may be checked. Thus individuals frequently pass years, losing ground in winter and spring, and rallying during summer, until at length they gradually sink into the grave. In some cases the improvement is more decided and lasting; the fever abates; the pulse loses its frequency; the cough subsides; the expectoration becomes mucous, and after a while ceases; the local physio-

signs are diminished, and if the amendment occurs in the first stage, before induration of the tubercular has taken place, vesicular respiration is in a measure restored; and in some rare instances the disease appears to be entirely removed. If there is a strong hereditary predisposition to the disease, the prognosis is always unfavorable.

I can not conclude my remarks under this head, without expressing the belief, that the idea so generally entertained in respect to the incurability of pulmonary tuberculosis is principally owing to the fact that the disease is not recognized until it has advanced nearly to the last stage, when there is no remedy. And yet I am free to say that there is scarcely a disease which, by one practiced in the use of the microscope, the stethoscope and percussion, that can be more easily detected in its earliest stage than this—the withered cells in the expectoration, the dullness on percussion, the prolonged expiratory murmur on auscultation, Thompson's gingival margin, together with the well known general symptoms, leaving little room to doubt as to the nature of the malady. Now and then there may be cases, the symptoms of which are so obscure that they can not be made out with any degree of certainty. Yet, if physicians would generally accustom themselves to detect the signs just mentioned, and use faithfully those means which recent experience has found so useful, pulmonary tuberculosis would, in a great measure, be disarmed of its terrors, and many would be restored to health who now sink to premature graves. •

STUDY OF UTERINE EXPRESSION AS A MEANS OF DELIVERY.

[Par le Dr. G. CHAMBRON, chef de clinique d'accouchements de la Faculté, ex-interna de la Maternité de Paris.]

Translated from the "*Archives Generales*."—By T. C. MINOR, M. D.

Delivery is the most important act of parturition; this proposition, which may appear exaggerated at first sight, becomes evident after some moments of reflection.

All physicians know that the expulsion of the fœtus takes place spontaneously in the majority of cases. The intervention of the accoucheur during this capital period, in appearance, is not strictly indispensable, or at least it is only in exceptional

cases; the presence of an experienced person is, to the contrary, necessary during the period that follows the accouchement, however natural, however happy that the accouchement may have been.

Therefore, it is necessary to watch the uterus until such a time as the placenta may have been expelled, and even after its expulsion; this surveillance must be active, intelligent, and at the same time minute. It is because these conditions are not always fulfilled, that we see come on during this interval of time, among women well accouched, grave accidents, compromising immediately or subsequently the life of our patient.

It is easy to convince ourselves by looking over the history of the obstetrical art, that at all times and in all places accouchers have occupied themselves in searching for the manner in which they must effect the expulsion of the placenta. Recognizing with one common accord the fact, that the irregularity of this phenomenon may bring about injurious consequences to the health of the party confined, different practitioners have followed a very variable line of conduct relative to the manner of performing the delivery.

After Riedel* we can distinguish four historical periods for the study of processes for delivery.

In the first period, which included the first fifteen centuries, the obstetrical art was still in its infancy, as its procedures were violent, empirical and almost barbarous. The fœtus remained united to the mother by a cord until such a time as the placenta was expelled. The proper weight of the child by its tension on the umbilical cord hastened the tardy expulsion of the after birth. If from an accidental cause the infant was separated from the mother, a graduated weight was attached to the cord, or the hand directly exercised upon it with energetic traction. They conjoined, besides, violent shakings of the body of the woman, either directly or indirectly, provoking sneezing, effort at coughing, etc. Fumigations of all kinds played a grand rôle; they had faith in the specific properties of certain medicines; finally, in certain cases, they had recourse to internal manœuvres for the purpose of detaching the placenta. If after this operation some fragments remained, they left to putrefaction the care of destroying them.

* Verhandlungen der gesellschaft für geburtskunde in Berlin. Jahrg: 2as-61-123: Br. 1847.

The characteristics of this treatment is the uncertainty of the method, irregularity of procedure, violence of manœuvres, inevitable consequences of the ignorance that existed at that epoch of the physiological phenomena of parturition.

The second period includes the sixteenth and seventeenth centuries; it extended from Rosslin to Mauriceau and Deventer. They trusted then in active intervention; the hand was introduced into the uterus immediately after the child was expelled, in order to extract the placenta; if this manœuvre did not succeed they abandoned it when persuaded that the operation would not bring about a good termination, or when they feared the production of serious lesions of the womb. It is only then at the last extremity that they left at this epoch the expulsion of the placenta to nature. This idea of the resources that we present in the uterine contractions, physiologically produced after the issue of the product of conception, had not yet penetrated into the domain of the obstetrical art, because it had not yet entered into the minds of accouchers; they could not draw expedients from a force of which they knew nothing, and, in this branch of medicine, as in the others, art progressed in the same manner as science, and was subordinate to it. Some voices only, those of Guillemeau, (1598,) of Mauriceau, (1695 to 1708,) were heard in favor of a less active and less violent intervention.

The third period extends from the commencement of the eighteenth century to the commencement of the nineteenth. It is marked by a reaction in favor of the expectant method. Nature resumed its long disregarded rights. This revolution of which the date goes back to a long gone by epoch from our day, had its origin at a very remote period; it was brought about by the disasters which the violent procedures of artificial delivery had produced, and also by the happy results obtained by leaving the termination of the case to nature, and the uterine contractions for the expulsion of the placenta. All physicians did not recognize at the outset the excellence of this procedure; accouchers in all countries were divided into two parties: to the one belonged the partisans of the natural method, to the other those of the artificial method. The first named became more and more numerous towards the end of the seventeenth century, and at the commencement of the eighteenth century counted among their

number, Ruysch (1725), Weissenborn (1797); afterwards Boeder, Crantz, Dionis, Puzos, Levret, Smellie, Saxtorph, Kalzenberger, Stein, Osborn, etc.

Their adversaries, among whom we find Mesnard, Deleurge, Burton, Bohmer, etc., did not trust in so exclusive a manner to active intervention. In regard to the *naturistes*, they did not proscribe in an absolute manner artificial delivery; but they wished that it might be subjected to fixed rules, like other surgical operations.

The fourth period, which dates from the commencement of the nineteenth century and extends up to the present day, developed more and more the principles which had taken their birth at a preceding epoch.

Delivery is considered a physiological phenomenon, the more so as the accouchment may, like it, in certain pathological cases, claim from us appropriate aid. In these only, the intervention of the physician is permitted, and must conform with the present ideas on the subject. There is, then, only a very slight shade of difference between the opinions of the various accoucheurs; one party often has recourse to artificial delivery, the other employs it but rarely.

Among the timid modern partisans of this method, we cite Wigand, Capuron, Nægele, Velpeau, etc.; among its enthusiasts, Osiander, d'Outrepoint, Killian, Siebold, etc. In France we employ two methods of delivery: one called the *natural*, the other *artificial*. In natural delivery, after the expulsion of the fetus, we wait a certain time, which varies from a quarter to half an hour, then we use traction on the cord, either making it the pulley of reflection, pointed out by classical authors, or drawing it in a determined sense only by the insertion of the cord upon the placenta, which seems to us more practical.

In artificial delivery we introduce the whole hand into the uterine cavity, then seizing the afterbirth with the open hand, remove it by degrees from the internal face of the womb, in order to finally bring it to the exterior.

These methods have each their inconveniences, of which we are often the witnesses, if we observe with attention that which happens in the best conducted hospitals. Those of *artificial* delivery are evident; we can easily understand that we can not with impunity carry on the more or less violent manœuvres it

the uterine cavity that we have described. Those of natural delivery, although less apparent, are not the less real; in this method, the tractions that we produce upon the cord have often the effect of breaking it at the level of its base, that is to say, at its placental insertion, so that we are then obliged to search directly for the afterbirth. M. Pagot, reported in his lectures before the faculty, that twice in fifteen days he was called by the same physician to see accidents of this sort, the rupture of the cord, which had occasioned the momentary retention of the placenta in the uterus. In both cases it was necessary to have recourse to artificial extraction. This operation, performed under favorable conditions, that is to say, in the first hours following the accouchment, is often laborious for the accoucheur, always painful, and sometimes dangerous, to the patient.

But it may happen that the internal orifice is closed, contracted, and presents an invincible obstacle to the passage of the fingers; under these circumstances we are reduced to the necessity of waiting until such a time as the orifice may open, and becomes more yielding. The wisest plan is to leave the placenta (proceeding from a pregnancy at term) imprisoned, inclosed in the uterine cavity. Sad extremity! and we have not yet supposed the most unfavorable case which may present itself; those in which, by an unfortunate inspiration, the accoucheur has been tempted to give a more or less strong dose of ergot, in order to expel the afterbirth, where we have to contend not only against the natural contractions, but moreover against the ergotic spasm of the neck. Under these conditions, if the accoucheur wishes to operate, he will expose himself to the risk of making a disastrous operation; he will bring about serious lesions of the womb, and will not attain at the same time the delivery of the woman.

If, on the contrary, the practitioner adopts the part of expectation, it may yield in two ways; indeed, the spasm of the neck may cease either spontaneously, or under the influence of appropriate treatment, (opiates internally, laudanum injections,) and the opening of the internal orifice will permit the passage of the after birth. This is the most fortunate case that may present itself, and it is not, at the same time, exempt from inconveniences, for during the sojourn of the after birth in the uterine cavity, from the accouchement up to the time of its tardy expulsion, we may have metrorrhagia, or symptoms of putrid infec-

tion. In fact, the open uterine sinuses, owing to the impossibility found by the womb in submitting itself to physiological contraction, while enclosing a foreign body, permit very easily extensive hæmorrhage, and are disposed to receive the infectious germs contained in the uterine cavity. Or may be the contraction of the neck persists, the internal orifice remains closed, things will then take a very grave turn, as in the case we have recently seen at the clinic; it may then happen that we may be forced to operate in a violent manner, in spite of an insufficient dilatation, for fear of immediate danger menacing the life of the woman. Hæmorrhage comes on either external or internal, the accouchee becomes pale, complains of lumbar pain, her strength fails her, the extremities become cold, the pulse small, imperceptible at the same time: in this extreme peril we have no longer the time to leave to nature the care of expelling the placenta.

Internal manœuvres must be resorted to, instruments must be employed in order to arrive at a result often uncertain, sometimes fatal. We can not, for the remainder, do better in order to give an idea of the difficulties that the operator may meet, of the pains that an accouchee may experience, of dangers to which she is exposed in these deplorable conditions, than to relate the history of a case of which I was a witness, and to which I made allusion a short time since.

OBSERVATION.—Retention of the placenta in the uterus for twenty hours after accouchement. — Hæmorrhage. — Forced extraction. — Uterine phlebitis. — Purulent infection. — Pleurisy. — Death.

Name, Louise Escoffant, aged eighteen years, seamstress, entered at the clinic the 15th of January, 1870, at No. 19. *Salle des accouchees*, service of Prof. Depaul.

This woman is a primipara, her constitution is good, the conformation of her pelvis is regular; last appearance of the menses the 15th of May, 1869; no accidents during pregnancy. After the last epoch of the menses, and the enlargement of the abdomen, this woman should be pregnant eight months.

Appearance of the first pains the 19th of January, at seven o'clock in the evening. Rupture of the membranes the same day at eleven o'clock; complete dilatation at ten minutes after eleven. Vertex presentation of the fœtus was expelled spontaneously at fifteen minutes after eleven at night. Labor had lasted five hours; infant's weight about five pounds.

The female students who were in the *salle d'accouchement* drew upon the cord, and in doing so broke it. Two hours after the expulsion of the foetus these pupils went and informed the midwife of what had occurred, and that it was impossible for them to deliver the after birth; the midwife essayed in her turn, by internal manœuvres, the extraction of the placenta, but did not succeed. She ceased her attempts, leaving the woman to repose, and the next morning, at about eight o'clock, informed M. Depaul of what had occurred the night previous. The Professor having placed the woman across her bed, chloroformed her for the purpose of a better examination, and to attempt something in her favor in case there should be any possibility of operating. The vaginal touch apprized him of the fact that the internal orifice of the neck was closed and contracted at the same time; the cervical cavity was dilated, and presented a form astonishingly enlarged at its base; above the internal orifice he found an ovoid mass which was nothing less than the body of the uterus containing the placenta.

After several fruitless attempts to penetrate into the interior of the uterine cavity, M. Depaul relinquished his endeavors. The membranes, the debris of the umbilical cord, and some clots had been drawn out.

The woman remained in the ward all day, during this time she took only soup. Vomiting, probably due to chloroform.

PRESCRIPTION.—Vaginal injections with marshmallow water, (decoction with poppy heads,) quart of laudanumized wash, ten drops.

Towards four o'clock in the evening the accouchee had an external hemorrhage; liquid blood from thence flowed in a very large quantity, then a certain number of clots were expelled, (in all about one and two-fifth pounds of blood). There seemed, also, at the same time, to be internal hemorrhage, for the uterus was distended, the patient complained of lumbar pains, was very pale, and fell into a state of syncope.

M. Depaul came again towards five o'clock, and found the orifice was closed, but supple and soft, so that he decided to make the delivery.

He introduced one finger, then two into the breadth of the orifice, but it was impossible for him to reach in this manner the bottom of the uterus. Then he replaced the fingers of the right

hand by those of the left, introducing them in an identical manner, and sliding upon them as conductors, the extremities of a forceps with wide bits.

The forceps loosened their hold, because the pieces of the placenta were rent, lacerated, and it was only at the fourth or fifth trial that a very considerable fragment of the placenta was extracted. The instrument was introduced again, and brought to the vulva a second piece more voluminous than the first, and finally some other smaller ones. In putting together all the debris of the placenta, which had been successively extracted, they succeeded in re-forming it entire. This operation had lasted half an hour. The poor patient, not chloroformed because of the gravity of her general condition, sent up during all this time heart rending cries, very painful to the assistants and to the accoucheur. No hemorrhage took place either during the operation or after delivery. Soups, vin. ip., 40 gr. syrup diacodium; unguents upon the abdomen with laudanumized chamomiles.

January 21st, 1870.—Sleep, uterus slightly painful upon pressure; bladder distended by urine; pulse 112, *ut supra*, catheterism.

January 22d.—Pulse, 120; lochia very foetid; uterus deviates to the right, and ascends as far as the false ribs. Ip. 1 gr. 50; alcohol, d'aconit; vaginal injections with permanganate of potash.

January 23d.—Pulse, 120; chill yesterday at 6 o'clock in the evening; lochia less abundant and less foetid; the lacteal secretion commences to be established; the patient has urinated only twice; in the meanwhile there remains still a little urine in the bladder. Base of the uterus deviates to the right, about two fingers breadth above the umbilicus; tongue moist; no appetite.

January 24th.—At our morning visit we are witness of a chill, then the pulse goes up to 140. Integuments of a yellowish straw color; lochia less foetid. Not any fragment of the placenta is expelled. Belly a little painful; no tympanitis, no nausea, no vomiting, *ut supra*.

January 25th, in the morning.—Third chill; pulse, 130; belly soft, painful; lochia less foetid; sulphate of quinine, 60 centigrammes; potion of Todd.

January 26th, in the morning.—Pulse, 120; patient complains of a pain in the right side of the chest; upon percussion, dull-

ness in the three inferior and posterior quarters of the right lung; souffle voile of pleurisy, ægophony, fly blister.

January 27th, morning.—Pulse 120; oppression; accelerated respiration.

From January 28th to 5th of February the condition of the patient continued to become worse; the pulse febrile; weakness more and more great, owing to a colliquative diarrhea, which astringents and opiates could not control.

February 7th.—We found during the morning visit extreme dyspnoea, tracheal rale, clammy sweat covering the face.

February 8th.—Patient expired.

February 9th.—*Autopsy.*

On opening the abdomen no trace of peritonitis was found; the uterus had in part resumed its usual aspect, but the uterine tissue had not its normal consistency; it had lost its ordinary pearly look; it was soft, as in œdema or pregnancy; its tint was a slaty yellow; towards the anterior part of the base of the uterus was found a vacuity resembling a dilatation of the uterine sinus filled with pus; this liquid could be traced to the extent of some centimeters by incising the vessel which contained it.

At the level of the thoracic organs was found, on the right side, the anatomical lesions of pleurisy; purulent, false membranes, thick, made adherent to the external surface of the pulmonary lobes by the costal walls. The lungs were compressed, settled against the vertebral column, and some liquid was found interposed between the false membranes of the new formation and the internal walls of the lobes; there had been the production of a sort of cystic sac.

Finally, at the base of the inferior right lobe was found a grayish black tissue, completely disorganized, having a foetid odor, assuming the character of pulmonary gangrene. Emphysema of the left lung; heart small, shriveled; fibrinous clots in the right ventricle.

No metastatic abscess in the liver, in the kidneys, or in the brain. These organs presented nothing in particular; the liver only was a little large.

We see by this observation that the retention of the placenta in the uterus exposes women not only to putrid infection, but, moreover, to uterine phlebitis and purulent infection. In the particular case that we have cited, the extraction of the after-

birth had been performed by a master in obstetrics of distinguished ability and prudence. These are not, for the remainder, the only inconveniences of the method of delivery at the moment used. Thus M. Depaul described this year, in his clinical lectures, *apropos* to a thing we have observed, the reason why, in natural delivery, the fragments of membranes detach themselves from the placenta and remain in the womb, where they cause accidents more or less grave.

When the cord is inserted centrally, and when traction is exercised perpendicularly at the surface of the placenta, the latter is expelled with all its membranes. On the contrary: when the umbilical stem is inserted in the margin, and when traction is used obliquely by connection with the foetal face of the placenta, the membranes free themselves from this surface, then from the uterine walls, and finish by becoming lacerated, and separating themselves from the placenta, which is expelled from the womb with only a portion of the envelopes of the egg.

Finally, tractions exercised upon the cord have sometimes the effect of producing uterine inversion, when the utero-placental detachment is not yet effected.

Uterine prolapsus, uterine deviations, have also been described as consequences of the same thing.

We can not then deny, at least in a certain number of cases, the insufficiency, the peril, at the same time, of the two methods of delivery that we have shown.

(To be concluded in July number.)

POISON OAK.

By J. B. A. Risk, M. D., Morgan, Kentucky.

A few articles have recently made their appearance in the medical prints respecting the poisonous effects of the rhus upon the skin, and the cure for the same, showing that physicians are not infrequently called upon to treat a very annoying and painful disease in persons caused by coming in contact with this plant. Hence, an apology for obtruding this article upon the professional reader.

Dr. Ira D. Hopkins, of Utica, New York, under date June 26, 1870, writes to the *Medical and Surgical Reporter*.

that while on his farm he took hold of some poison oak, and from this he became so badly affected that he suffered beyond description, day and night, for two weeks, and, as the books were silent as to a remedy, he tried various means recommended by physicians, who had seen cases, without any good effects. He then tried a solution of alum, which acted like a charm, giving immediate comfort and relief.

Dr. W. W. Dunn, of Indiana, has favored us with an article on this subject, published in the same journal, in which he informs us that the decoction of the leaves of cotton-wood is regarded by him as a specific for the effects of poison oak. Of this he prescribes a teaspoonful several times a day until the disease disappears, an effect which this medicine never fails to produce. He asserts that the use of it in this way is unattended with any danger—it can be drunk *ad libitum*.

James S. Bailey, of Albany, N. Y., in the April number of the same journal, says: there is no necessity of treating this affection constitutionally, for he always succeeded with the following:

R Hydr. bi. chlor., 3ss.
Distilled water, 3ij.

Add and dissolve

Muriate Ammonia, 3j.
Nitrate Potassa, 3ij.

M.

Apply thoroughly, three times a day, with a camel's hair pencil, until the parts affected are inflamed, and then discontinue it for a few days, using instead calomel ointments, U. S. P. until the parts are healed. He says he rarely ever has to repeat the wash.

In my experience in the treatment of this erysipelatoid affection of the skin and subjacent tissue induced by any one of the family of the rhus, whether the radicares, toxicodendron, vermix, etc., nothing has been so satisfactory in its curative effects as the decoctio querci albæ; indeed I regard it as a specific; for if the parts diseased are bathed in the warm decoction sufficiently, the soothing effects, the speedy subsidence of the pain, and tumefaction and redness soon follow, announcing to the sufferer the sanative influence of this agent. The subsidence of the inflammation and the corrugation of the skin will not perhaps always take place at the first bathing, but, if followed up a

few times, will be sure to occur, ending in a permanent cure, without the use of constitutional remedies. In order to effect these results the parts diseased should be in contact with the decoction, either by immersion or by application with a sponge for the space of thirty or forty minutes, or even longer, when there is much inflammation, and repeated every four hours.

The poison oak has a very peculiar influence upon the skin, which is counteracted by the properties resident in the oak bark, and the former has already been found to be a successful remedy in the cure of some obstinate cutaneous diseases; its effects materially modifying or putting an end to the conditions upon which the endermic maladies depend. But its baneful effects upon the skin will certainly limit very much its use as a medicine.

FIBROUS TUMORS OF THE UTERUS.

By THEOPHILUS MACK, M. D.

Read before the Medical Mutual Improvement Society, St. Catharines, Canada.

One of the most important organs in the economy of nature, and one also, a large segment of which, in the present state of surgery, is ominously tabooed to the most enterprising confrere, is unfortunately very frequently the seat of a parasitic production—the fibrous tumor—deriving its nourishment from the bosom of a parent it is ultimately to destroy.

There is no neoplasm which, after having been so confounded with other morbid growths by the old surgeons who endowed it with sixteen different names, bewilders the poor practitioner more than this. He is met with *in limine*, by “Fibroid” as if it meant something a shade different, “fibrous polypus,” as if the fact of its being pediculated altered the whole distinctive character of the disease, or “fibroma,” or “myoma,” and it is only after a bother (*Hibernice*) that he is awakened to the discovery that they are just all one and the same.

Fibrous tumors occur in the cellular tissues, and are generally developed beneath investing or lining membranes. Of all anomalous growths which have their seats *in utero* they are the most frequent, varying in size from a hemp seed to an adult head. Unfortunately they have their seat more frequently in the fundus than in the cervix. Smooth or superficially lobed, they have always a spheroidal shape, and are extremely firm to the touch, unless œdematous from undergoing change. They are somewhat elastic and heavy, and sections of these productions bear a nearer resemblance to intervertebral cartilage than

to any other natural growth in the body. Portions of their substance may be yellow, brown, or blue, with white lines or bundles of fibres in concentric circles or curves, the fasciculi of the bundles diverging and interlacing; sometimes the fibres are matted into a nearly uniform white substance, sometimes exactly resembling the fibrous tissue of the uterus, in fact a slight alteration may produce the fibrous tumor from the same blastema which gives origin to the uterine fibre. The blood vessels are venous, and are distributed chiefly in the areolar tissue, the vascularity is by no means uniform; some can easily be injected from the uterus, others remain quite pallid; no lymphatics are to be discovered.

Cruveilhier says that the venous system suffices for the simple nutrition of these productions of a low order of vitality, this circulation flows from sinuses or conduits devoid of regular coats in the fibro-cellular tissue, to a net work of veins surrounding the circumference of the tumor, and communicating with the circulation of the womb. Under the microscope, smooth organic muscular fibres are more or less present, nuclei are strewn through the substance, but often we find rather a fibrous appearance than a fibrous structure.

Among the results of degeneration of this morbid structure, two of the most remarkable are the formation of cysts and calcification. The cystic change after an œdematous condition, results in development of multilocular cysts, or a single cyst in the periphery of the tumor. This metamorphosis arises from obliteration of the blood vessels creating an infiltration of fluid, which, re-uniting at certain points, becomes encysted; sometimes the wall is formed like a geode from the fibrous tissue itself. The fluid varies in color and consistence very much, being clear straw-colored and serous, or thickly viscid and dark, or like synovia, sometimes containing more or less cholesterine. Calcification may be compared to the crystallization of saline fluids obstructed in their current, and causing the anatomical alteration of the production by the infiltration of calcareous matter due to the obstruction of its nutrition.

Suppuration and gangrene likewise terminate the life of a fibrous tumor occasionally, and under favorable circumstances they are "consummations devoutly to be hoped for." In a few cases a more favorable issue yet takes place, namely,—atrophy.

As to the origin of fibrous tumors it must be confessed that we are at a loss for a satisfactory theory, one thing only appears definite, that they are not hypertrophies of the normal uterine fibrous parenchyma, but independent morbid growths not continuous with the substance of the organ, but surrounded by their peculiar cellular atmosphere; they are not exclusively incident to either celibacy or the marriage state, and are seldom found before the age of twenty-five.

A diagnostic point with reference to carcinomatous diseases is that they are more frequent in the upper segment of the womb than in the cervix.

As the scope of all communications to this society is intended to be eminently practical, I think I shall subserve this design best by the description of a few typical cases selected from memory chiefly. When the fibrous tumor grows into the pelvis submucously it generally becomes more or less pediculated. In the form of a fibrous polypus we are now fortunately able to triumph over the disease very uniformly.

A lady, married, mother of children, complained of an obstinate debilitating metorrhagia, for which she had failed to obtain permanent relief for a period of two or three years. The uterus measured about one and a half inches more than it should with the sound, os patulous, and the sound gave the sensation of passing over an uneven surface just above the os internum. The uterus imparted the impression of more than normal weight. Two sponge tents were introduced at an interval of twenty-four hours, the second and larger, being carbolized, was allowed to remain about forty-six hours secured *in situ* by a tampon of cotton; upon being withdrawn the vagina was douched for a few minutes with infus. lini. An examination now enabled the forefinger of the right hand to detect a body engaged partially in the os internum.

The cervix uteri being continuously held with a long single toothed volsellum, used for drawing down the cervix in the operation for amputation of that part, the finger could be used so as to explore the substance, which was ascertained to be somewhat pediculated. The forceps being held by an assistant, a long uterine polypus forceps was introduced as the index finger receded, and by cautious manipulation it was ascertained that the blades held a substance in their grasp, the mass was then pulled down and a hold secured still higher up, where, by traction and rotation, a fibrous polypus was successfully removed about the size of a small plum. Cystic degeneration had occurred in the centre of the growth; after removal solution of persulphate of iron was freely applied, a piece of cotton saturated with a weaker solution of the same was left in the cervix and retained by a tampon in the vagina for twenty-four hours, when it was removed and complete convalescence ensued.

Mrs ———, æt. 49, although evidently past the climacteric, complained of excessive menstruation, as she supposed it to be, the uterus being much enlarged. Sponge tents having been introduced, and the canal of the cervix fully dilated, a fibrous polypus was discovered with a broad pedicle attached to the upper part of the cervix. A wire cord having been passed round the pedicle with Braxton Hick's instrument and tightened, it was allowed to remain in that strangulated condition for about

six hours, when it was crushed through by screwing up the wire, and removed. The growth was about two inches in length and half an inch in diameter, it was an unchanged fibrous production.

3d. I was sent for by a practitioner to see a lady, who, he feared, was suffering from inversion. A dense, heavy, slightly elastic mass completely filled the vagina, the os uteri could be felt compressing the tumor, and the sound passed fully up five inches within the uterus. The chain of an *ecraseur* with careful manœuvring was passed up as high as possible, and the ratchet worked until it began to cut; after a few minutes the mass severed from its attachment near the fundus, and by steady traction with strong polypus forceps, it was delivered through the vulva. This tumor was fully as large as a fetal head at the seventh month, a small portion was undergoing fatty degeneration. Strong solution of persulphate of iron was applied to the place where the pedicle had been crushed off, and both uterus and vagina were tamponed with cotton soaked in a weaker solution; a good recovery ensued.

The fibrous tumor will attain an enormous size, when, although submucous, it is also in a certain degree parietal.

4th. In this case the woman, about forty-five years of age, sent for me to consult with her attending physician, when reduced to an extremely low state. Within the cervix about two inches from the os uteri could be discovered by conjoined palpation, a large submucous fibrous mass. A sponge tent which had been introduced by the attending physician having failed to dilate sufficiently, I divided the cervix freely with a pair of scissors, the tumor being then steadily drawn down by strong forceps, I made out a narrowing portion, and I could feel its attachment from below the fundus to about two inches from the os, upon the right side. It certainly was not a pedicle, yet I considered that the surface left exposed would not prove to be too extensive. The wire cord of Braxton Hicks' instrument was placed as high up as possible, but broke upon tightening, the chain of the *ecraseur* was then made to crush off a large segment, and several smaller pieces having been detached by the nails and torn away by the volsellum, or strong serrated forceps, the *ecraseur* was again employed, and another large piece removed. As the patient had been upon the table nearly four hours, and as much more than three-fourths of the growth had been removed, it was thought prudent to desist; styptics were applied, and she convalesced without any bad symptoms. The growth appeared to be intermediate between the submucous and the parietal tumor.

The frequent hæmorrhages in these tumors are caused most probably by the rupture of the veins between the fibres in the cellular tissue. A lady aged thirty, sterile, came to me from

one of the south-western States, to be cured of what she considered to be "incessant menstruation." Upon dilatation of the cervix, I found near the fundus a hard irregular submucous growth, with a broad base, around which I managed to get the wire of an ecraseur, and I easily crushed off a mass about the size and shape of a cow's teat; this tumor was gritty with calcareous matter and pieces of what resembled bone, with fibrous fasciuli and fat. After one year the tumor returned, when I again removed by torsion and evulsion with a forceps a much smaller fibrous mass, and a month or two subsequently I used a curette freely, and after a couple of weeks more, applied acid nitrate of mercury to the lining membrane of the uterus. It is now nearly eight years since the treatment, and the lady has enjoyed excellent health.

An illustration of a parietal fibrous tumor occurred in a lady who came under my care for metrorrhagia and leucorrhœa, she was about twenty-two years of age, married, but childless. The tumor rose up above the pubes, and appeared to occupy the anterior half of the body of the uterus. The cervix was divided bilaterally as high up as possible, with great relief; after several weeks an incision was carefully made into the fibrous mass. Two or three months after her return home an immense evacuation of pus took place *per vaginam*, and the tumor diminished greatly; about a year after this occurrence she became a mother. Under this treatment, I have seen atrophy of the production on a few occasions, and almost invariably great relief to the hæmorrhagic symptoms. In enucleation, or incision, or electrolysis, or cauterization of these parietal fibrous growths, I believe the danger to be chiefly from septicæmia.

I am sorry to say that there is only one little manœuvre; that of pushing the tumor above the brim when it has increased in size so as nearly to fill the pelvis, which can afford to the poor sufferer any relief when the fibrous growth is subperitoneal. When cysts are developed the fibro-cyst may be evacuated with benefit.

Mrs. —, of Gowanda, New York, consulted me for an abdominal tumor. For many reasons I diagnosed a cyst attached to the uterus and not ovarian; I evacuated the cyst *per rectum*, and secured a drainage tube within it upon removing the trocar. This woman appeared temporarily much relieved, and I lost sight of her.

Mrs. Bender, aged 47, mother of thirteen children, five years previously complained of uneasiness in the hypogastric region. Menstruation became irregular about two years ago, when she supposed that she was pregnant; then she had metrorrhagia, then a suppression for three months, followed by an excessive flow for six months, another intermission and then a metrorrhagia, which has continued for nearly three months, up to the

time of this report, March 1st, 1871. Mrs. B. first consulted me for what she supposed to be dropsy. She stated that the abdominal enlargement had commenced about three months before, and that it gave her great distress; she had previously suffered from pain in the right iliac region, which was now more urgent in the mesial line with bearing down and bloody discharges from the vagina. External examination showed the abdomen to be greatly distended by fluid, dull on percussion, no wave to be detected. The uterus was enlarged and eroded at the os; but no tumor could be discovered upon exploring through Douglass' cul de sac. Urine normal in quantity and character, appetite failing. The symptom most complained of was the abdominal distention; the limbs were not anasarcaous. Diagnosed an ovarian tumor (cystic) and ascites. She was treated with constitutional remedies to improve the general health, and upon the 18th of March, her friends insisted upon an operation, after all the dangers being fully explained to them. She was completely anæsthetized by Dr. Alexander, and, assisted by Drs. Goodman, Sullivan, Oille, Comfort and my brother, an exploratory incision was made. Upon opening the peritoneum, a thin sac filled with fluid immediately protruded through the incision, which it followed as it was enlarged. Upon introducing the hand, it was evident that the cyst was not ovarian; a trocar was introduced, and about two gallons of a straw colored thin serum was evacuated, and the sac drawn out, when it was found to be attached to the fundus uteri, and to contain a fibrous tumor at the bottom, about the size of a cocoa-nut, united by a pedicle to the top of the womb anteriorly. The upper surface of the tumor viewed from within the sac was purple colored, with several small cysts arising from it. After some hesitation I decided to remove the tumor and cyst, for the following reasons:—Firstly, the examination had extended far beyond the limits of an ordinary exploration with abdominal incision. Secondly, to cut off the cyst and secure it externally was impracticable from the tenuity of its texture; to return it, and unite the wound would seem very likely to produce a number of evil consequences. Thirdly, there was a distinct pedicle, and it was at a spot most favorable for securing it by clamps; and lastly, it was quite evident, from the rapid growth of the cyst, that the tumor, if allowed to remain, would soon prove fatal. The pedicle was then secured by clamps, ligatured by whipcord and divided by the *écraseur*, and the subsequent steps, after gastrotomy, as fully described by me in a successful case of ovariectomy to this Society at a late meeting, having been completed, I felt some hopes of a successful result. For three days she did well, but on the fourth she began to sink, and died on the morning of the fifth day, from septicæmia. Upon *post mortem* examination, a small quantity of thin partially decom-

posed blood was found in the pelvis; of this we had no indication, although vaginal examinations were daily made, so as to open with a trocar and douche the pelvic cavity, if any fullness from extravasation could be detected. Traces of incipient cystic disease were found in both ovaries, the peritoneum deeply colored. Such is an instance of the degenerating submucous fibrous growth, which no man can diagnose without peritoneal section. I shall always regret that this operation should have been so imperfect, and I recommend in any similar case the removal of a portion of the uterus, ovaries, and fallopian tubes, so successfully effected by Dr. H. R. Storer, of Boston.—*Canada Lancet.*

AMERICAN MEDICAL ASSOCIATION.

The twenty-second annual meeting of the American Medical Association was commenced at Pacific Hall, San Francisco, California, Wednesday, May 3d.

About two hundred medical gentlemen were present. The present officers are: President, Dr. Alfred Stille, of Pennsylvania; Vice-Presidents, Dr. J. S. Wetherby, of Alabama; Dr. Henry Gibbons, of California; Dr. G. J. Heard, of Texas; Dr. Samuel Willey, of Minnesota; Permanent Secretary, W. B. Atkinson, M. D., Philadelphia; Assistant Secretary, Dr. Joseph Tucker, of California; Treasurer, Dr. Caspar Wistar, of Pennsylvania; Librarian, Dr. F. A. Ashford, of District of Columbia.

About half-past eleven o'clock, Dr. Arthur B. Stout called the meeting to order, and introduced the President, Dr. A. Stille, who was greeted with applause.

The Right Rev. Bishop Kipp was next introduced, and offered a prayer to the Throne of Grace.

A ride to the Clift House, a visit to Toland Medical College, and "collations" seemed to have continued most of the second day. The report of the officers of the Nomination, and the various committees, together with some volunteer papers, were before the body upon the third day.

ELECTION OF OFFICERS.

The Committee on Nominations made the following report: We commend for officers, President, Dr. D. W. Yandoll, of Kentucky; First Vice-President, T. M. Logan, of California; Second Vice-President, Thos. L. Ives, of Alabama; Third Vice-President, R. M. Mitchell, of Alabama; Fourth Vice-President, J. K. Bartlett, of Wisconsin; Assistant Secretary, D. Murray Chester; Librarian, F. A. Ashford, Philadelphia; Treasurer, C. Weston, Philadelphia. Next place of meeting, Philadelphia.

On motion of Dr. Davis, the report was adopted, and the officers unanimously accepted:

Time of meeting, 1st Tuesday in May, 1872. The Committee have selected as

Committee of Publication—Dr. F. G. Smith, of Pa., Chairman; W.

B. Atkinson, Pa.; D. Murray Chester, Pa.; F. A. Ashford, D. C.; Caspar Wistar, Pa.; H. F. Askew, Del.; J. Aitkin, Meigs, Pa.

Committee on Prize Essays—Dr. A. Stille, Chairman, Phila.; F. G. Smith, Phila.; D. A. O'Donnel, Baltimore; B. F. Dawson, N. Y.; L. P. Bush, Delaware.

Committee on Medical Education—J. S. Weatherly, Alabama, Chairman; L. Cooper Lane, S. F.; J. M. Toner, Washington; Samuel Wiley, Minnesota; W. O. Baldwin, Alabama.

Committee on Medical Literature—T. Parvin, Indiana, Chairman; —Carpenter, Oregon; J. P. Whitney, San Francisco; —Mendenhall, Cincinnati; L. P. Garvin, Rhode Island.

Committee on American Medical Necrology.—Chairman, John D. Jackson, Ky.; Chas. W. Parsons, R. I.; E. A. Hildreth, West Va.; Wm. Lee, Washington, D. C.; T. M. Logan, California; W. C. Warrenner, Oregon; H. D. Holton, Vermont; W. J. Scott, Ohio; W. D. Buck, New Hampshire; A. Sager, Michigan; V. Kersey, Indiana; A. E. Ames, Minnesota; H. K. Steel, Colorado; —Mason, Wisconsin; S. D. Gross, Philadelphia; D. W. Stormont, Kansas; J. B. Johnson, Missouri; H. R. Storer, Massachusetts; H. W. Rushenburger, U. S. Navy; I. W. H. Baker, Iowa; O. J. Hamilton, Illinois; —Peabody, Nebraska; L. P. Bush, Delaware; G. W. Russell, Connecticut; Paul C. Chew, Maryland.

Committee of Arrangements—Dr. E. Hartshorne, Chairman; Dra. S. W. Gross, Murray Chester, J. F. Maury, James Tyson, S. W. Mitchell, John H. Packard, William Pepper, Richard Townsend.

OFFICERS FOR THE SECTIONS.

Chemistry and Materia Medica—Prof. R. E. Rogers, Philadelphia, President; E. Cutter, Massachusetts, Secretary.

Practical Medicine and Obstetrics—D. A. O'Donnell, Baltimore, President; B. F. Dawson, N. Y., Secretary.

Surgery—John T. Hogden, Missouri, President; W. F. Peck, Davenport, Iowa, Secretary.

Meteorology and Epidemic Diseases—George Sutton, Indiana, President; Elisha Harris, N. Y., Secretary.

Medical Jurisprudence—S. C. Busey, Washington, President; E. L. Howard, Baltimore, Secretary.

Physiology—J. C. Dalton, N. Y., President; D. Payton, Oregon, Secretary.

Psychology—Isaac Ray, Philadelphia, President; John W. Kirwin, Pennsylvania, Secretary.

Library Committee at Washington.—Dr. J. M. Toner.

On the Climatology and Epidemics of—Maine, Dr. Wood, Portland; New Hampshire, A. B. Crosby; Massachusetts, E. Cutter; Rhode Island, Edward T. Caswell; Connecticut, I. C. Jackson; New York, Dr. W. F. Thoms; New Jersey, E. M. Hunt; Pennsylvania, W. S. Wells; Maryland, C. H. Ohr; Georgia, A. I. Senimes; Missouri, W. S. Edgar; Alabama, Dr. R. T. Mitchell; Texas, S. M. Welch; Illinois, D. Prince; Indiana, D. Clark; District of Columbia, Dr. J. W. H. Lovejoy; Iowa, I. Williamson; Michigan, Douglas; Ohio, J. A. Murphy; California, Dr. F. W. Hatch; Tennessee, B. K. Bowling; West Virginia, E. A. Hildreth; Minnesota, Charles N. Hewitt; Virginia,

Wortham; Delaware, L. B. Bush; Arkansas, Dr. Sinks; Mississippi J. P. Moore; Louisiana, S. M. Benitts; Wisconsin, J. K. Rantell; Kentucky, L. P. Yandell, Sr.; Oregon, E. R. Fisk; North Carolina, F. J. Haywood; Colorado, R. G. Buckingham; South Carolina, M. Simmons.

Special Committees—Dr. A. L. McArthur, Chicago, Illinois. On the nature and process of the restoration of bone.

George Sutton, Indiana—Comparative Pathology and the effects which diseases of inferior animals have upon the human system.

Dr. Antizell, Chairman of the Committee on the cultivation of the Chinchona Tree.

Vaccination—Chairman, Dr. T. M. Wise, Kentucky.

Anatomy and Diseases of the Retina—R. F. Mitchell, Alabama.

Some Diseases Peculiar to Colorado—John Elaner, Denver, Colorado.

Skin Transplantation.—J. Ford Thomson, Washington, D. C.

J. K. BARTLETT, Secretary.

THEN CAME THE FEMALE PHYSICIAN QUESTION.

Under the head of unfinished business, an amendment to the Constitution, offered at the last meeting of the Association by Dr. H. Hutchinson, of Philadelphia, was taken up for consideration.

The proposed amendment is embodied in the following resolution:

Resolved, That the Constitution shall be so construed as not to exclude delegates from Female Colleges.

Dr. Harding, of Indiana.—I move the adoption of that resolution, and would like to make a few remarks pertinent to the question which is termed vexatious. It has been before this association repeatedly, year after year, and the time has now arrived when it should be definitely settled. I can see no good reason why females should not be allowed to practice as physicians—can see no good reason why, when practicing physicians, they should not be admitted to this Association as delegates, when qualified. They have arrived at that point when their professional ability and zeal cannot be ignored, even by those who claim to have the least respect for them. You all realize the necessity for taking action in this matter, and that speedily—for your professional duties have brought you more or less in contact with female physicians. These women have combatted against all opposition, have overcome nearly every obstacle thrown in their path, and now simply ask a recognition from us—a mere recognition of them, as physicians and not interlopers. Gentlemen, you cannot give them the cold shoulder: such a course would be entirely inconsistent with the profession in the estimation of intelligent right-minded people. You cannot shift the occasion by placing the question in a false position, even were any of you so disposed, but must consider it impartially. With me it is not simply: "Shall we admit the women as delegates," but "Is it not for the interest of the profession to aid them in every possible manner?" Suppose that we refuse their application, what may be the result? Instead of harmony in the profession we shall have strife, and the legitimate practice of medicine will be endangered. If we refuse the women admission we shall drive them into homœopathy, etc. Let the women come in, open the Colleges to them, dash down the barriers and all will be well (Applause.)

Dr. Davis, of Illinois.—I hope the question will not be disposed of until the Association understands its full meaning. What does the proposed amendment mean? Gentlemen, it means that the delegates from Female Colleges—whether male or female—are eligible to become members of this Association. Thus far they have sent a male representative, but if we adopt this proposed amendment, the door will then be thrown open to females, and these females will undoubtedly come in. But pause, and think for a moment. Has the time come when you are willing to throw aside all distinctions as to sex? Will that time ever come? Is there no difference between the sexes? And are we to forget all distinction because of popular clamor? I make no comparisons as to the merits of the relative sexes for the profession—but I say, gentlemen, "Let the female remain in her sphere, and I will remain in mine." (Applause.) I will say to her, "You no more can do the work designed for me than I can do the work designed for you." Woman has her sphere—man has his sphere, and the assumption that woman rises when she unsexes herself, I claim to be erroneous. But if we are to admit of the change, if woman is to step into every profession, then she will take the shape, the plain and the rough work of man—who will admit such work to be within her sphere. The Creator has given the sexes many distinctive features, and intended each for a different sphere. This fact is unmistakable. Woman, pure woman, may be a power in the land—in her sphere. Then let her not mistake her sacred mission as wife and mother, as the light of the household. Let us not yield to the cry of "Woman's rights," as now construed. I have had women at the clinical basin, stripped a patient before them, made examinations and remarks, conducted myself with the same freedom which characterizes the ordinary clinic, conversing about the case and explaining all its important points. But, gentlemen, after all my experience, I am more firmly convinced than ever that it would be better for these women if they remained in their sphere. (Applause.)

Dr. Donahue, of Ohio.—I move that the resolution be tabled.

The motion was withdrawn.

Dr. King, of Pennsylvania, made an able, elaborate address in behalf of the amendment. Not being a speaker he did not propose to say much, but he wanted the question settled. In his own local society it had been defeated and defeated year after year, and it was getting troublesome. It was beneath the dignity of an association of learned scientific men to war with women. (Hisses.) If they must exercise their bellicose propensities, they should enlist under General Crook to fight the Apaches. Gentlemen had talked about the sphere of women. Would these gentlemen be a little more explicit in their definition of the meaning of the word sphere. Perhaps they would take India for their standard—where the women were treated as brute animals—

"Doomed by the law of man to toil;
Yoked to the plow and fettered to the soil."

Let them assist in lifting up woman, if they consider her degraded. Some gifted minds had handsomely termed her "the ministering angel." That sounded well, smacked of euphony, but according to their definition was not practical enough. Could she not be a ministering angel and also a physician? "Oh, no, she lacks the intellectual capacity for such a purpose. She is weak and silly, and can

not grasp with the science of medicine. We have the intellect, we can grasp," said the speaker. Why he had examined the records of the Female College of Philadelphia, and knew what he was talking about—knew that the women had made rapid strides in the profession, and that many of them were skillful practitioners. If it was consistent with the code of ethics, and he believed such to be the case, the women should certainly be admitted to the Association. As the case now stood, a member of the Medical Association could not recognize a female as a member of the profession—could not consult with her. If he was summoned, and found a woman had charge of a case, what could he do? According to the law of the Association he must say to her, "Walk out of this house and let me take exclusive charge of this case." The speaker would rather remove his right arm than perform so mean an act. As the case now stands he could not consult with the President of the Association, the eminent Dr. Stille, and this because the Doctor was consulting physician in the Philadelphia Female College. Under the present *regime*, if the Association consulted with its President it stultified itself. (Applause and hisses.)

Dr. Henry Gibbons made a brief speech upon the question. He favored the amendment: believed that women had a perfect right to practice medicine, but did not think mixed colleges healthy. He believed that his residence upon the verge of the continent, away from the turmoil and strife over the woman question in the East, qualified him to consider the matter dispassionately. He was astonished at the course of his old friend, Dr. Davis, and the *ad captandam* argument he presented. The question, being one of vital importance, demanded serious consideration at the hands of the members.

Dr. Johnson, of Missouri, opposed the amendment.

Upon the fourth day the woman question came up again.

Dr. Atlee, of Philadelphia, offered the following resolution:

Resolved, That the American Medical Association acknowledges the right of its members to meet in consultation the graduates and teachers of Women's Medical Colleges, provided the code of ethics of the Association is observed.

Dr. Storer hoped that no action would be taken on the resolution. Inasmuch as the question was discussed fully yesterday, he would protest against the question coming up again. He thought that the sense of the Association was fully ascertained by the votes already taken.

Dr. Johnson, of Missouri, had a few words to say in behalf of the resolution. He hoped it would pass. This was not a question as to the admission of women into the Association; it was merely a resolution to protect the medical science. He would regret to have the women assailed by the Association; any honorable man would agree with him on that proposition. Let the women have their own associations and manage their own affairs; but when it comes to consulting, all barriers should be removed. (Applause).

Dr. Gibbons called for the reading of the resolution.

The Secretary complied with the request.

A SPRIGHTLY DISCUSSION.

Dr. Storer.—I move to lay the resolution on the table. (Applause)

Dr. Johnson.—Can a motion be made while I have the floor?

President.—No, sir.

Dr. Johnson continued his remarks, showing the peculiar position in which the President was placed as consulting physician of a Female Medical College in Philadelphia. According to the existing state of affairs, even members of the Association could not consult with the President without violating its laws.

When Dr. Johnson concluded, cries of "Question!" "Question!" "Dr. Atlee!" "Dr. Atlee!" were heard.

Dr. Atlee.—Gentlemen, we only ask for this Association a certain endorsement in the course pursued. The peculiar position we of Philadelphia occupy compels us to demand the attention of the Association: all we ask is a definition of the course we are to pursue.

Cries of "Question!" "Question!"

Dr. McArthur, of Illinois, suggested the settlement of the question by the local society; if that became impossible, then it might be appealed to the National Association. In the present case there was no necessity for the Association to decide the question—it would not change the condition of affairs.

Dr. Gibbons.—Then why not vote upon the question at once?

Dr. McArthur.—It would simply be a work of supererogation.

Dr. Gibbons.—Does the gentleman mean to say that it is wrong for this Association to make a declaration of truth? Am I to understand that the Association will shirk its duty, and leave so important a matter in a chaotic state? Answering for many of the intelligent faces before me, I may answer in the negative.

"Question!" again from all quarters.

Dr. Toner.—I have an amendment to offer: "Provided, That they are supported and recognized by the local and State Medical Societies."

Dr. Storer.—I call for another reading of the resolution.

Request complied with.

Dr. Storer.—One word, Mr. Chairman; (Cries of "Go on!" "Question!")

A vote taken on the amendment offered by Dr. Toner resulted as follows: Ayes, 53; noes, 61. Lost. (In voting, delegates arose and were counted by the Secretary.)

Dr. Storer.—I call for the ayes and noes on this question.

The Association, by a vote taken, decided against the calling the ayes and noes.

Dr. Stout.—Unless we adjourn the Oakland excursion project will be defeated.

A Delegate.—I have some resolutions to offer.

The President.—You are out of order, sir.

A Delegate.—I call for the reading of Dr. Atlee's resolution.

The Secretary again read the resolution.

Dr. Storer.—One word—(Cries of "Question!")

Dr. Storer.—I will state, with all due respect to the honored President—and I esteem him highly—that if we endorse him in his capacity as consulting physician of the Philadelphia Female College, we stultify ourselves. And if he had been consulting physician a year ago, he would not occupy his present position.

(*Dr. Gibbons.*—I call the gentleman to order).

Dr. Storer.—I accept the order, and proceed to state that our President himself has expressed his views on the question, and he has had experience. (Cries of "Question!" "Question!")

Dr. Toner.—I wish to say—(An incessant din prevented our reporter from hearing what was said.)

THE ORIGINAL RESOLUTION.

The question recurred upon the original resolution.

Dr. J. M. Brown moved that the subject matter be indefinitely postponed.

Dr. Toner moved to lay the resolution upon the table.

The President called for an expression of opinion by the Association.

Misunderstanding the question before the house, many delegates arose, then became seated, and continued to give evidence of indecision, until the body of the house recalled reminiscences of the fishing experiences by the incessant bobbing in progress.

Finally a delegate called upon the President to state the question.

Dr. Atlee called for a vote upon the original proposition.

Dr. Davis desired to know if the Association would falsify its record of yesterday and continue to wrangle until it was too late to go over the bay. The question under consideration did not amount to any more than tweedledee and tweedledum at best.

Dr. Cole.—I move that we adjourn until 8 o'clock this evening, and make the consideration of this resolution the special order. Carried.

THE OAKLAND EXCURSION.

The members of the Association, together with other invited guests, proceeded to the Oakland boat under the escort of Professor Carr, and paid the promised visit to the "city over the bay."

STATE MEDICAL SOCIETY OF WEST VIRGINIA.

The Medical Society of the State of West Virginia, met June 7th, in the Court House of Berkeley county.

At 2 o'clock P. M., Dr. Bland, of Weston, the President, called the Society to order.

Mr. President read his address, giving a brief history of the origin and progress of the Society, and spoke very appropriately of the proud future that awaits an institution organized as this Society was for the promotion of purposes so laudible.

Dr. L. H. Laidley, delegate from the State Medical Society of Pennsylvania, was introduced to the Society by Dr. G. A. Hamill, and on motion of Dr. Hupp he was invited to take a seat with the members and participate in the proceedings.

The report of the Committee on Publication was read by the chairman, Dr. Bates, and accepted.

The Treasurer, Dr. Hupp, made his report, which was referred to a committee—Drs. Sharp, Ramsey, and Weisel—to be audited; reported correct, and adopted.

Dr. Sharp, of the special committee to settle with Dr. James E. Reeves, asked for and was granted further time.

Dr. Hupp remarked that he held in his hands a report on Topography, Climatology, and Epidemic Diseases of Upshur County, by Dr. Elias S. Bronson, who was absent, and which, if the Society so

request, should be read; which, on motion, was read by the Secretary.

Committee on Necrology not present. On motion of Dr. Bates, the committee was granted until next meeting to report.

Dr. Todd, of Wheeling, read a lengthy and instructive report on the Medical Botany of the State, and detailed some novel cases of poisoning occurring in his practice, in the successful management of which he relied nearly exclusively on applications of aqua ammonia externally, and aromatic spirits of ammonia internally, which was referred to the Publishing Committee, on motion of Dr. Lazzell, with instructions to publish such portions as they may deem appropriate.

Dr. W. H. Sharp read a volunteer paper replete with interesting matter on the *Temperature* of the body in health and disease, which, on motion of Dr. Weisel, was ordered to be published *in extenso*.

Dr. L. H. Laidley made interesting remarks on the temperature of the blood in health and disease, and inquired of the author if he had noted the temperature of the blood—not noted.

Dr. Bates offered resolutions, which were unanimously adopted, instructing that, hereafter, no member who may be in arrears for admission fee or annual dues shall receive a copy of the transactions, and if settlement be neglected for two years the names of all such shall be dropped from the roll of members.

Dr. Bates also offered a resolution, which was adopted unanimously, that the constitution be amended in such manner that the annual assessment shall become due and payable in advance on the first Wednesday of June annually, instead of first of January as heretofore.

On motion of Dr. Hupp, the Secretary was instructed to furnish each member of the Society with a copy of the resolutions.

Society adjourned till 7½ o'clock, P. M.

The society met pursuant to adjournment, at 7½ o'clock, P. M.

A volunteer paper was read by Dr. H. J. Weisel, detailing the history of five cases, successfully treated, suffering from the effects of that species of entozoa denominated *trichina spiralis*. The paper was referred to the Publishing Committee for publication.

On motion of Dr. Todd, it was resolved that a committee be constituted who shall make still further investigations, and report at the next meeting, on the Medical Botany of the State.

Dr. Bates, in view of the fact that the hour of adjournment was rapidly approaching, moved that the questions for discussion be indefinitely postponed, which was adopted.

Dr. Hupp presented the report of Dr. S. L. Jepson, of Wheeling, in accordance with by-law IV, giving a list of the officers and members of the Medical Society of the City of Wheeling and county of Ohio, together with other matters of interest, which was read by the Secretary and ordered on file.

Dr. H. W. Brock, of Morgantown, offered a preamble and resolutions endorsing the action of the Legislature in its liberal encouragement of educational facilities in the State, which were adopted.

The Board of Censors reported favorably to the admission of John Reynold, M. D., and J. J. Straith, M. D., as members, the former, of Sheperdstown, and the latter, of Charlestown. Both were unanimously elected.

Early in the session N. D. Baker, M. D., of Martinsburg, and John B. Snodgrass, M. D., of Mill Creek, Berkeley county, were admitted to membership.

Dr. Bates moved that a committee be appointed to memorialize the

Legislature to abolish all laws (State) prohibiting practical Anatomy. Adopted.

Dr. Hupp proposed a resolution recommending and earnestly urging all School Boards to *require* children to produce evidence of their having been successfully vaccinated before they are permitted to attend the public schools within the State.

Dr. S. L. Jepson, of Wheeling, and Dr. J. W. Ramsay, of Clarksburg, were appointed essayists to report at next meeting.

Delegate to the Pennsylvania State Medical Society, Dr. G. A. Hamill, of Martinsburg; Delegate to the Medical Society of the State of Ohio, Dr. S. L. Jepson, of Wheeling.

Committee on Publication—Drs. Bates, Hupp, Dent, Safford, and J. G. Wilson.

Committee on Epidemics—Continued.

Necrology—Drs. Bates, Wilson, and W. H. Sharp.

The following gentlemen were elected officers for the ensuing year, viz:

President—Dr. J. M. Lazzell, Fairmont.

Vice President—Dr. H. J. Weisel, Wheeling; Dr. G. A. Hamill, Martinsburg; Dr. L. R. Charter, West Union.

Secretary—Dr. Wm. M. Dent, Newburg.

Treasurer—Dr. John C. Hupp, Wheeling.

Wheeling, West Union and Point Pleasant were put in nomination, and a ballot being taken, Wheeling was chosen as the next place of meeting.

Dr. Weisel offered a resolution declaring it unprofessional to render professional services by contract, or for a specified sum per annum, which was adopted.

After a very pleasant session the Society adjourned, to meet in Wheeling on the first Wednesday of June, 1872.

COMMENCEMENT OF THE CINCINNATI COLLEGE OF MEDICINE AND SURGERY.

The Commencement exercises of the *Cincinnati College of Medicine and Surgery* took place at the Christian Church, on Sixth street, between Smith and Mound streets, June 29th, evening, in the presence of the Trustees and Faculty of the College and a large number of the friends of the institution. The venerable Dean of the Faculty, Dr. B. F. Lawson, presided over the exercises, and Dr. Lillenthal delivered the diplomas to the gentlemen graduates.

There were thirty-two graduates, as follows:

Edmund H. Banks, Ohio.
Wm. A. Bradford, Missouri.
Jno. G. Albers, Washington, D. C.
James P. Cope, Indiana.
W. T. Cooper, Indiana.
Wm. M. Cox, Missouri.
Geo. W. Daniels, West Virginia.
W. C. W. Glazier, Pennsylvania.
Charles B. Hawley, New York.

Benjamin E. Miller, Ohio
S. N. Osburn, Indiana.
A. Miesse, Ohio.
J. T. Martin, Ohio.
M. M. Strawsburg, Ohio.
J. C. Stovall, Alabama.
Jas. E. Taylor, Ohio.
Jeff. C. O'Neal, Montana.
Wm. P. Weaver, Ohio.

Homer Jackson, Pennsylvania.
 Z. C. Kelso, Indiana.
 A. L. King, Ohio.
 C. C. Leachman, Indiana.
 Julius Marcus, Ohio.
 C. C. Robertson, Kentucky.
 F. A. Norman, Ohio.

J. J. Black, Ohio.
 C. W. Osburn, Ohio.
 A. C. Lewis, New York.
 G. A. Weems, Missouri.
 A. C. Irwin, Illinois.
 P. L. Tribbey, Illinois.
 Wm. H. Banwell, Ohio.

The exercises were commenced with prayer by Rev. Mr. Hobbs.

Dr. Lawson, after a few introductory remarks, urged the young men to continue a habit of study, for which the foundations had been laid by the faculty of this institution. They had been taught how to learn, and a larger amount of knowledge was in readiness for their conquest. And if there were any among them who had no heart to enter upon this as their life-work, he would advise them to retire to the plowshare or the jackplane.

As the names of the gentlemen were read by Hon. Milton Saylor, each of the gentlemen was presented with his diploma, the mark of his attainments, and the right hand of the fraternity was extended to him by Rev. Dr. Lilienthal, as President of the College Board of Trustees. The advice of the last-mentioned gentleman to the members of the class was of a practical nature. He congratulated the class on the successful termination of their studies, and wished them all possible success in the profession on whose threshold they stood. He had no doubt they would all reflect credit upon the institution that gave them their diplomas, and make skillful and worthy practitioners. He was glad to be able to speak of the continued prosperity of their *alma mater*.

The institution was established on a firm and lasting foundation, and they need never fear of having the diploma of an extinct college in their possession to mark the period of their entrance upon the important profession which they had elected to follow. There were before him thirty-two graduates, representing ten different States of the Union, from the empire State of New York to the border State of Missouri. This fact alone indicated the vitality and prosperity of the college, were there no other evidence accessible. All the obstacles that had stood in the way of the success of the college had been battered down one by one, the last and greatest victory being that of compelling the recognition of the college by the Cincinnati Hospital in common with the other colleges of the city. Against all the protests of the Cincinnati College, it had been entirely ignored by the institution referred to, and a selfish and aristocratic monopoly maintained. But the faculty had not despaired. They had renewed their protest against the great wrong from time to time, and Dr. Thacker, by his repeated attacks on the outrageous system, had finally broken it down. The students of the college now enjoyed equal privileges with those of other medical institutions in the city.

The college had encountered a loss during the past year by the death of Prof. Taliaferro. By the demise of Dr. Taliaferro the institution lost a true and faithful friend, a thorough scholar, and a successful teacher. The community lost in him a skillful practitioner, a friend to the poor, and a man in the noblest and fullest sense of the word. His memory is blessed, and will always be cherished by all his associates, and the large number of his pupils. The chairs of ophthalmology and the chair of surgery, now vacant, would have to be

filled, and the Board of Trustees had taken the question under serious consideration. The friends of the institution might rest assured that they would be filled by men who would be an honor to the college and a pride to their profession.

At the conclusion of the Doctor's address the audience was dismissed with the benediction of Rev. Mr. Hobbs, and the graduating class and a number of their friends adjourned to Keppler's, on Fourth street, to partake of refreshments. While the discussion of the good things was going on, the following toasts were drank:

"Our worthy Dean, Dr. B. F. Lawson." Response by Dr. Lawson.

"The Graduating Class." Response by Dr. Z. C. Kelso.

"The Board of Trustees." Response by Hon. Milton Saylor.

"Our invited Guests." Responses by Dr. Melvain and Rev. Mr. Hobbs.

The party broke up about half-past eleven o'clock, the graduates again receiving the congratulations of the Faculty and all their friends.

APPLICATION FOR CANCER.—An Italian Medical Journal recommends the following application for cancer of the breast: Concentrated acetic acid, 15 parts; creosote, $3\frac{1}{2}$ parts; water, 450 parts. A case is mentioned, in which a cancer was removed, and cicatrization completed, in six weeks. The application was made on lint, four or five times daily.—*Dental Times*.

Book Notices.

A TREATISE ON DISEASES OF THE NERVOUS SYSTEM. By WM. A. HAMMOND, M. D., Prof. of Diseases of the Mind and Nervous System, and of Clinical Medicine in the Bellevue Hospital Medical College. With forty-five illustrations. New York: D. Appleton & Co. Cincinnati: R. Carroll & Co. 8vo. pp. 752.

The forthcoming of this very valuable work on diseases of the nervous system was announced some time ago, and our readers, with ourselves, will be glad of its appearance. Prof. Hammond is an able writer, and has had a very large experience in the treatment of nervous diseases; and that a treatise by him would be one of a high order was what we anticipated, and it affords us pleasure to state that our anticipations have been realized.

The author states that he endeavored to present a treatise, which, without being superficial, would be concise and explicit, and which, while making no claim to being exhaustive, would, nevertheless, be sufficiently complete for the instruction and guidance of those who might be disposed to seek information from its pages. That he has been successful we have no doubt will be the decision of all competent to judge.

The work embraces an introductory chapter, which relates to the instruments and apparatus employed in the diagnosis and treatment of diseases of the nervous system, and five sections. Of these, the first treats of diseases of the brain; the second, diseases of the spinal cord;

the third, cerebro-spinal diseases; the fourth, diseases of the nerve cells; and the fifth, diseases of the peripheral nerves.

The author very justly claims, as a feature of the work, that it rests to a great extent on his own observation and experience, and is therefore no mere compilation. He has views of his own on every disease considered, and has not hesitated to express them.

As Prof. Hammond is of undoubted authority in the branch of medicine he represents, and having in mind the somewhat famous discussion on brain tumors, etc., that occurred last fall between Drs. Bartholow and Comegys, we thought we would consult him on some of the points at issue between the disputants. On page 452 of the *REPERTORY* of 1870, Dr. B. quotes Dr. C. as saying in a published paper: "It is not difficult to recognize lesions of the brain by observing the condition of function of organs supplied by the cephalic nerves; but, to say with certainty what is the nature of lesions, is most often impossible." Again, "I repeat, as the sentiment of the best writers, there are no pathognomonic symptoms of tumor, abscess or softening of the brain." Says Prof. Hammond, "When there is no such previous history, [if hemorrhage, thrombosis, or embolism. When there is, the diagnosis is much easier. ED.] softening of the brain may be confounded with chronic meningitis, meningeal hemorrhage, or tumors. In tumors the most prominent symptoms are pain and convulsions, while the intellect remains unaffected. The pain is exceedingly intense, while in softening it is dull. The speech in tumors is generally unaffected." On page 313 is the following: "The presence of severe pain in the head for a long time is of itself some indication of the existence of a tumor, if it is unaccompanied by febrile excitement. Epileptiform convulsions, occurring after the age of forty, should excite suspicion that their cause is to be found in a morbid growth of some kind. The character of the convulsive seizures will aid us in forming an opinion of their etiology. When produced by a tumor they are generally unilateral, the loss of consciousness is not so complete, and there is rarely subsequent stupor. The diagnosis from epilepsy is rendered more evident by the fact that, in tumor, the convulsions are seldom accompanied by mental weakness, and never by periods of active unconsciousness. From softening, the distinction can be made without much difficulty in the majority of cases. The acute pain, the integrity of the mind, and the absence of general paresis, will usually suffice. But sometimes the discrimination can not be made, for there are cases of tumor in which there is very little pain, in which the mind is involved, and in which the paralysis is not very strongly marked."

In regard to abscess of the brain, Prof. Hammond says: "The diagnosis of suppurative encephalitis is, in the first stages, difficult, if not impossible; the symptoms being common, as I have already said, to several other disorders. From cerebral hemorrhage the distinction can be made without difficulty, for, although encephalitis may be developed with rapidity and by an apoplectic seizure, the tendency is for the subsequent phenomena to become progressively more marked, while in hemorrhage there is a gradual amelioration. The pulse in hemorrhage is from the first slow and regular, unless the medulla oblongata be the seat, while in encephalitis it is rapid and irregular."

"The symptoms due to tumors are often almost identical in character with those attendant on abscess. The history of the case is our only safe guide. The fact that the brain has received an injury of some kind, will indicate suppurative encephalitis as the probable difficulty."

ON THE PHYSIOLOGICAL EFFECTS OF SEVERE AND PROTRACTED MUSCULAR EXERCISE; with special reference to its influence upon the secretion of Nitrogen. By **AUSTIN FLINT, Jr., M. D.** Prof. of Physiology in the Bellevue Hospital Medical College. (Reprinted

from the N. Y. Medical Journal.) New York: D. Appleton & Co. Cincinnati: R. Carroll & Co. 8vo. pp. 91.

This little work is an account of the scientific observations of the urine and other excreta of the celebrated pedestrian, Weston, who proposed in the Summer of 1870 to make an attempt to walk four hundred miles in five consecutive days, and, upon one of those days, to walk one hundred and twelve miles in twenty-four consecutive hours. He offered to submit himself to any scientific observations that Prof. Flint might wish to undertake in connection with this effort, which offer Prof. Flint gladly accepted.

Observations were made for three distinct periods; first period, five days before the walk; second period, the five days of the walk; the third period, five days after the walk. For the fifteen days Mr. Weston was under observation, a trusty assistant was with him every instant, day and night, who weighed his food, and drink, and made notes. The urine and feces were sent to the laboratory of Prof. Doremus, where they were analyzed under his direction by his able assistant, Mr. Oscar Loew. The results show the value of the immense amount of labor bestowed by Mr. Loew upon these analyses.

The work will be found interesting to every physician. A number of important results were obtained valuable to the physiologist.

THE PARENTS' GUIDE; or Human Development through Inherited Tendencies. By MRS. HESTER PENDLETON. Second edition, revised and enlarged. One vol. 12mo. Price \$1.50. S. R. WELLS, Publisher, 389 Broadway, New York.

What America needs above every thing else to give a steady and substantial growth to her institutions is, *good mothers*, and it is the purpose of this book to furnish such information, and to give such council as shall contribute to an improved *motherhood*. Written in a terse, clear style, yet refined and almost delicate in the treatment of the difficult phases of the subject, it commends itself at once to the reader, and can not fail to be productive of lasting benefit. Written by an American lady of much experience and observation, it is especially adapted to American women, while American men, whose interest in the affairs of home life is scarcely inferior, will find its attentive perusal a profitable employment.

Editorial.

TIMES ARE CHANGED AND WE ARE CHANGED.—The *Lancet and Observer* for June, in announcing that the Cincinnati Hospital had been freed from party dominancy, states the fact in the following dolorous style: "It is well known hereabouts that for a long time a few discontented and unhappy gentlemen have labored to bring a degree of 'outside pressure' to bear upon the trustees to effect various revolutionary changes in the complexion of the staff. The Board very manfully resisted these machinations for a time, taking the very proper ground to know no school [that is, none but the Miami school]. They have recently drifted from this safe policy, and in a fit of child's play resolved that, after October 1, 1871, no member of the staff shall be connected with any medical college!" Now we think it is very probable that before the "revolutionary changes" were brought about there were "a few discontented and unhappy gentlemen," for it was enough to make any honest man "discontented and unhappy" that a great public charity like the Cincinnati Hospital should be under the

dominancy of a party of men. and carried on for the almost exclusive benefit of a single college, whose faculty, taken as a whole, had less claims upon it as regards competency to treat the sick than any of the other colleges. But times have changed, and those honest gentlemen whose pious souls were grieved because right and justice were trampled under foot and wrong flourished now rejoice in the overthrow of iniquity and the vindication of righteousness. But, on the other hand, how is it with the party of which the *Lancet and Observer* is the organ? Are they in the blissful state of feeling they were wont to be before the Board, "in a fit of child's play, resolved that after October 1, 1871, no member of the staff shall be connected with any medical college?" We should think not from the threat contained in the following quotation: "We already hear of new clinical enterprises. We learn that the Miami College is arranging new and special clinical plans. Now what we desire to ask, is this state of things advisable or profitable to any one? Will the spirit of antagonism thus engendered be of advantage to the hospital or the medical interests of this city?" Thus is the aphorism, "times are changed, we are changed," proven to be correct. Those who a little while ago were "discontented and unhappy" that right was trampled in the dirt, rejoice now that it has arisen and vindicated itself, while, on the contrary, those who were hilarious that fraud prevailed, are "discontented and unhappy" that justice waves her flag triumphantly. Discontentment and unhappiness, which a little while ago overclouded the upright, has now settled with its gloom upon the wicked—and such a gloom!

In further illustration of the correctness of the statement that the views of many individuals are according to time and circumstances, and not according to principle, we

* Will it be of advantage to the Miami Medical College, seeing that the Miamis have ALWAYS lost every high-handed game they ever attempted to play.

will place side by side a couple of extracts taken from editorial articles of two different numbers of the *Lancet and Observer*—one of the date of February, 1861, when the Ohio faculty monopolized the hospital of the city, and one from the last issue, June, 1871:

FEBRUARY, 1861.

It must not be forgotten that this Faculty (Ohio Faculty) has to give the course of instruction in the school during the session, attend the hospital—and every intelligent physician is aware how much time is required if the service is well done—and after this attend to their private patients. Will any one say that any set of men are equal to this? We, for one, speak from experience, and say they are not. We had occasion to express the same opinions some two years ago in this journal. WE THINK EVERY HOSPITAL SHOULD HAVE ITS MEDICAL STAFF UNCONNECTED WITH ANY OR ALL SCHOOLS.

JUNE, 1871.

However we might approve the selection of any of the worthy and competent medical gentlemen of this city, outside of medical teaching, to vacancies as they occur in the hospital—as we have done—yet the adoption of an invidious rule, excluding all but these, is so manifestly absurd, that we suspect few will be found to support it, except those who, from motives of revenge or personal promotion, may expect to reap the advantage.

It makes a great difference with some persons whether or not a verdict for damages should be rendered—whether it is their ox that has been gored to death by a neighbor's bull, or whether a neighbor's ox has been gored to death by their bull. When the Ohio faculty monopolized the hospital to the exclusion of all other schools, the *Lancet and Observer* exclaims: "We think every hospital should have its medical staff unconnected with any or all schools," but when the Miami school has the monopoly, the exclamation is—"The adoption of an invidious rule (excluding the colleges) is so manifestly absurd, that we suspect few will be found to support it, except those who, from motives of revenge or personal promotion, may expect to reap the advantage."

"Principles as firm as a rock." What a farce! Or is the Miami party not to be regarded as fair representatives of humanity? We hope not for the sake of humanity.

To advocate sentiments as true beyond peradventure, and then so soon as one's interests become changed to ascribe the lowest and vilest motives, revenge and personal promotion, to persons for maintaining the very same views, exhibits an entire degradation of morals, or, rather, no morals at all. With the lower animals might is right; and with people who act in the way of which we speak, the rule is no higher. It may seem harsh to say so, but the assertion is true, and the truth may as well be spoken. Their code of ethics is the mere animal code, and knows no right, no justice, no principles of any kind that would indicate that the individual belongs to any higher grade of life than that which springs from the ground, and partakes nothing of that higher life which is presumed to come from another sphere. Our Quaker friends recently held in this city, we understand, some meetings "to cultivate the sentiments of a higher life," but the persons of whom we speak could not be profited by them, for no one can cultivate that which he does not possess.

"We learn that the Miami College is arranging new and special clinical plans." The Miami College "arranged new and special clinical plans" under their old organization at the old St. John's Hospital, and presented their students the hospital ticket without charge to prevent them patronizing the then Commercial Hospital—and what was the amount of the clinical material? They had from no patients at all in the house to bring before a class up to as high as five. A more complete fraud in the way of pretended clinics was never perpetrated upon students, and all "new and special clinical plans" must necessarily be of a like kind. There are but two hospitals in the city that approach any ways near affording adequate clinics, and those are, as every physician of Cincinnati knows, the Cincinnati Hospital and the Hospital of the Good Samaritan. The Miami can not send their students to the latter, for the reason that its

whole staff is composed of the Faculty of the Medical College of Ohio, with the exception of Prof. Tate, of the Cincinnati College of Medicine and Surgery. There only recourse for a hospital will be some of the small pay hospitals in which there is seldom more than two or three patients that can be brought before a class, and frequently none at all. But the day for sham clinics has passed by. There was a chance for their success during the time of the old rickety Commercial Hospital, but not now. The school that attempts them, will do so to its own injury.

"Will the spirit of antagonism, thus engendered, be of advantage to the hospital, or the medical interests of the city?" The Hospital will have nothing to lose. It can succeed better in its great object as an eleemosynary institution by closing its doors to clinical instruction than by opening them. Not a cent of the proceeds of the sale of tickets to medical students goes to the support of the institution, but to defray the expenses of the clinics. But, granting they will be able to do so, what medical interests of the city will be affected by the Miami College's prevailing upon their students to stay away from the Hospital, because they can not have the monopoly of the institution to the exclusion of the other schools? Their students will suffer for want of proper clinical advantages, but that will not affect the medical interests of the city. Medical students may keep aloof from a city where an unjust discrimination is made between the schools, and when they are compelled to witness the comedian tricks of a professor of another school than their choice, or go without clinical instruction, and at the same time imagine they will not be on an equality with other students in the advantages to be enjoyed. No one will stay away from this city when he knows that all its advantages are open to him, unless he voluntarily refuses them, for even the Miami can not bar their students from the Hospital, if they see proper to go there.

But we have given the article of our neighbor more attention than such an exceedingly weak thing deserves.

PENNSYLVANIA STATE MEDICAL SOCIETY.—The late convention of this Society was made memorable by the passage of one resolution and the rescinding of another. The former was offered by Prof. Gross, and was as follows:

"*Whereas*, The meetings of our Society have hitherto been, in great degree, barren of scientific and literary papers, and, therefore, deficient in actual interest; therefore be it

"*Resolved*, That it shall be the duty of the President annually to appoint some member to deliver an address in medicine, an address in surgery, and an address in obstetrics, reviewing the progress during the previous year of these respective branches of medicine and their collateral sciences."

The resolution rescinded was the famous one of 1860, whereby members of the association were prevented from consulting with female physicians or with physicians who held positions in women's colleges or hospitals.

The first shot fired on this subject was by Dr. Washington L. Atlee, who stated that this convention at its last session had moved to refer this question of consulting with females to the American Medical Association; and as that body, by admitting Dr. Thomas as a delegate from the Women's Hospital, had practically decided the matter, he therefore moved that all resolutions affecting the status of women's colleges and female physicians be rescinded.

Dr. Atkinson denied the statement of Dr. Atlee relative to the admission of Dr. Thomas, and furthermore stated that he (Atkinson,) as permanent Secretary of the American Medical Association, would, in the present condition of the question, refuse to place the name of Dr. Thomas upon the roll of that Association.

Dr. Andrew Nebinger, in slow and deliberate rhetoric, opposed

the rescinding of the resolution, and kept the floor until the hour of adjournment. He also occupied the initial hour of the afternoon's session, and was the only one who spoke against Dr. Atlee's resolution.

Dr. Trail Green, of Easton, stated that at the time the original resolution was passed it probably represented the feeling of the profession, but a different state of affairs exists now. He said that women have taken precedence in the completeness of their medical education, and cited the Women's College of New York as having a board of examiners composed of such men as Willard Parker and Austin Flint. He also said they (the women) are ahead of the men in having so divided their studies that both courses shall not be attended in the same year, thus preventing the manufacture of so-called doctors in ten months, as can be done in connection with some of the medical colleges for male students. In conclusion, Dr. Green remarked that menstruation, and another condition with which men have a good deal to do, should be no bar to the rescinding of the resolution under consideration.

Dr. J. Solis-Cohen moved to amend the resolution by adding to it that nothing in the rescinding shall be construed so as to allow women to be represented in this Society. The amendment was accepted, and proved a sufficient sop to Cerberus, for a call immediately afterwards to postpone indefinitely the whole subject was lost by a tie vote, and on the yeas and nays being called, the resolution of 1860 was rescinded by a vote of fifty-five to forty-five.

NEW YORK EAR DISPENSARY.—There has recently been commenced in New York, an ear dispensary for the exclusive treatment of diseases of the ear. The Surgeons are Geo. B. Pomeroy, M. D., Samuel Sexton, M. D., Consulting Surgeons, Austin Flint, M. D., John T. Metcalfe, M. D., Luis F. Sass, M. D., T. G. Thomas, M. D., J. B. St. G. Roosa, M. D., Norton

Folsom, M. D. Many of our readers will recognize Dr. S. Sexton as an old Cincinnatian, who is now living in New York. So well manned as is the Dispensary we have no doubt it will do a good work. It is open, daily, from 11 A. M. to 1 P. M.

SICKNESS FROM WALL PAPER.—The London *Lancet* reprehends the filthy custom of pasting one wall paper over another, till a thickness of an eighth of an inch or more has accumulated. It goes on to say that this was the cause of the puzzling offensive smell at Knightsbridge barracks, London, that recently threatened the whole establishment with fever. The examination of the drains, and the taking up of the floors revealed nothing, while the introduction of increased means of ventilation left the evil as it was. At last an examination of the wall papering was made, when it was found that one paper was pasted over another till a thickness was accumulated in one case amounting to fourteen layers. Between these layers there was rotten paste, in which fungi and even worms generated, the stench spreading over the establishment.

WM. R. WARNER & Co.—We should have noticed this house before, but neglected it. Their circular appeared in the April number of the *REPERTORY*, to which we refer for particulars. The firm (154 North Third Street, Philadelphia), is among the most reliable in the country. Besides being general wholesale druggists, they are manufacturers of officinal and other sugar-coated pills, pure iodoform and medicinal elixirs, fluid extracts, etc. Quantities and styles can be so arranged as to come within the limits of any expense desirable. A discount of 25 per cent. will be made to physicians on all orders for pills amounting to \$10 net. Physicians can forward their orders with assurance of honorable treatment.

A STEP IN THE RIGHT DIRECTION.—The Faculty of the Medical De-

partment of Harvard University have adopted the rule that hereafter candidates for the doctorate must have attended lectures for three years. During each year only a partial course of study is to be required, and the student is to be examined at its close upon the lectures he has heard. Although the Harvard school may at first suffer a falling off in the number of its students, the ultimate effects of this change will be to increase its popularity as well as its influence.

A friend has sent us a copy of a correspondence between the Secretary of the Philadelphia Hospital Medical Society and the Dean of the Medical Faculty of Harvard, the former transmitting to the latter some congratulatory resolutions of the Society in reference to the change.

EDITORIAL CHANGE.—The June number of the *New York Medical Journal* contains the announcement of the retirement of Dr. Edward S. Dunster from the editorial charge of the journal. During the five years that Dr. Dunster has been its editor the journal has been managed with much ability. His successors are Drs. William T. Lusk and James B. Hunter, who "bring to their labors a ripe experience and qualifications of a rare order."

TOBACCO AND "TWENTY-FIVE."—A Southern clergyman writes: I ceased the use of tobacco last March, since which time I have gained twenty-five pounds in flesh, and saved twenty-five dollars to my pocket, and gained twenty-five per cent. in ease of mind from harassing dreams and sleeplessness.

TYPOGRAPHICAL ERROR.—The name of Dr. Walker, the author of the highly interesting article on small-pox in the June number of the *REPERTORY*, is printed J. A. Walker instead of J. P. Walker as it should have been. We will here mention that the epidemic of small-pox, so far as considered, although it extended into 1870, includes but a very small portion of that year.

THE CINCINNATI MEDICAL REPERTORY.

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CINCINNATI, AUGUST, 1871.

No. 8

REMARKS ON THE AFTER TREATMENT OF CATARACT OPERATIONS.

By Professor SEELY, of the Medical College of Ohio.

Probably no one point of ophthalmology has centred in it more interest on the part of the general profession and the laity than that of the treatment of cataract; and certainly, with the present operative treatment, no one part of their specialty is regarded with a livelier interest by specialists. I propose to make known a few of the means resorted to, which I have reason to believe have had much to do with insuring the almost-uniform success I have met with in the peripheric extraction, the operation devised and practiced by Professor Graefe.

The very best results of the old flap extraction showed ten per cent. of losses; and we find that some of the causes were such an extensive wound to the cornea—thus imperfect healing—inflammation of the iris, extension to the ciliary body, and general inflammation of all the structures—panophthalmitis.

With the ideas that governed the after treatment, it was tedious in the extreme, and a source of intense suspense and anxiety to the operator, the patient, and all concerned, for I speak chiefly as an assistant (in the flap operation); though not entirely.

Of course, such an operation, notwithstanding its superiority over the needle, excited in all operators a longing for some modification that perhaps would insure still better success, at least be attended with more ease to the operator and patient from a more rapid convalescence.

Dr. Albert Mooren, of Dusseldorf, in 1862, was the first to
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start in a new direction. The results of an iridectomy in the old flap as a preliminary step had been attended with better results than those without, for the moment the aqueous humor escapes the pupil contracts, no matter whether under the influence of atropia or not; hence, to make the lens escape it must be pressed through the pupil, and consequently produce a great amount of stretching, or even laceration. Now an iridectomy, to a very great extent, prevented such an injury to the iris, and did away with most of the dangers of iritis from such injury.

Mooren proposed to divide the operation by first making an iridectomy, and then, in two or three weeks, follow it up with the extraction. The results were certainly flattering, as, while it was powerless over a general suppuration of the cornea, it undoubtedly had some influence over the lesser forms, and a still greater over the iritis.

The point so strongly insisted on in ovariectomy is, handle the parts in the abdominal cavity as little as possible. Every one will readily apply the same principle to the extraction of cataract; and, again, to make the application general, we must, in such an operation as cataract, take largely into consideration the moral effect of the operation, and its influence upon the success. Of course, in such a plan as Mooren's, the patient was subjected to a double shock, and this was probably the prominent point Professor Jacobson, of Konigsburg, had in view when he devised his "modification" in 1863; but, of course, had still clearer ideas upon the healing of the wound, and to-day we are acting upon those ideas, viz. that a sclero-corneal wound heals more readily than a corneal.

It seems strange that it should be such a difficult matter to inculcate distinct ideas upon the coarse anatomical structure of the eye. Now it is needless to say that no one will ever thoroughly carry out the steps of any operation without the anatomical knowledge, much less those upon the eye, when so great accuracy is indispensable to the maximum success. Jacobson, taking advantage of the point of the peripheric attachment of the iris, made his knife pass in through the opaque transitional tissue, coming, thus, immediately in front of the iris. After the extraction, he made an iridectomy downwards, with the view to remove that part of the iris most likely to have been injured by the exit of the lens. Of course there were operative difficulties in such a proceeding, and again the optical effect was bad.

Disregarding the principle I have spoken of, viz., the least amount of touching of the internal structures, Critchett and Bowman, of London, (Royal London Ophthalmic Hospital Reports of '65, fourth vol.) devised instruments for adapting the old linear extraction, used for soft cataract, to the cortical form, a decided improvement on the operation suggested, and to some extent carried out with clumsy instruments by Schuft, (Waldan) of Berlin, in '60.

They made a section of the upper part of the cornea, incising a large portion of iris, then, after lacerating the capsule, introducing a scoop behind the lens, and thus gradually bringing it out.

As early as '65 Prof. Graefe had been practicing a new operation, in fact, by the end of the year, had probably made a hundred trials with such success as made him continue, and during the next year reported three hundred extractions by his so-called "modified linear extraction."

In the spring of '67 when I attended his clinic he was making no other operation, and had just devised his hard rubber scoop for pressing out the lens. I have recorded in a letter from Berlin in the summer of '67, in the columns of the *Western Journal of Medicine*, the enthusiasm he displayed in regard to the operation; also some of the opinions of others upon it.

As early as the spring of '66 I had made the "modified linear extraction" a few times successfully, and found at the meeting of the Ophthalmological Society in June, '66, that two or three others had tried it. As yet, however, there was no enthusiasm, nor indeed was there in London in the first of the year '67. Operators had become familiar with the other operations, and to those who only have a limited number of cases it is no trifling step to go from a familiar operation to an untried one. Of course the new operation had met with much *theoretical* opposition from men of high authority.

One of the most prominent and an indispensable step of the operation is the iridectomy, and it was natural that this should be met with the cry of mutilation, as all iridectomy operations were.

When I began practicing the operation here I had general practitioners continually talking against it, that it created a deformity. I have already in another place published the steps

of the operation, and have shown how the upper-lid obviates, to a great extent, both the bad cosmetic effect, and also most of the optical disadvantages, so that such an eye is capable of having about as good vision as one with a circular pupil. Suffice it say, its adoption is becoming more and more universal.

With this brief introductory I propose to take up the question of after treatment. I have already stated that sloughing of the cornea, greater or less, and iritis were the great causes of failure in the flap extraction. Looking back over the after treatment of the old flap extraction, and reviewing it in the light shed by the present operation, I can not but feel that that operation sinning, was sinned against as well, and, notwithstanding the wonderful results published by some who have adopted the peripheric extraction, I also can not but feel that there is yet too great reluctance about interfering in the after treatment. After the old flap extraction the eye remained bandaged for four days, and frequently at the end of that time the cornea would be one mass of necrosed tissue. Certainly wounds made by accident were never treated on any such principle. And so long a delay before beginning observations and attention was not necessary. I distinctly remember my horror on one occasion, by finding, the next day after the flap extraction, the bandage hanging free from the eyes. And as distinctly do I remember my astonishment to find the edges of the wound agglutinated, and the anterior chamber filled out.

The first extraction I made, a la Graefe, I made a mistake in the number of hours, not intending to remove the bandage under six or seven hours, but found it had only been five. The anterior chamber was filled, and the edges of the wound sufficiently agglutinated to retain the aqueous humor. It might be urged that so early an inspection as five or six hours is unnecessary, as no inflammatory reaction will have taken place, and again, the great liability to opening the wound, either by your manipulations, or movements on the part of the patient. To the first objection I would simply reply that in a large number of cases there is no reaction at all, and the patient will be able to read No. 7 Pæger the next day. Again, where reaction is to follow, the germs of it are probably sprouting, and by opening the eye and carefully instilling a little atropia you nip them in the bud. To the second objection, which I grant is a serious

one, the tearing open of the wound, I can only reply, with the necessary care on the operator's part, and the necessary instruction of the patient, it need hardly follow. I have, I believe, in every case opened the eye in at least six hours, and introduced atropia, and have never yet had any accident. I have in every instance made the first openings myself, and have in only a few instances entrusted the attention to an assistant during the first four or five days, always, of course, for the first week seeing the patient once every day myself. I always, again, have the bandage changed twice a day from the first, and if after twenty-four or forty-eight hours there are any symptoms of inflammation, I change the bandage three times a day; and relieve pain or uneasiness with opium. Chloral for actual pain fails in toto so far as I have seen.

Now it will be seen that I institute a treatment quite identical with that for injuries or inflammations, from other causes, regarding, to make the point strong, the eye as an injured eye. This plan is certainly in conformity with the teachings of the great master, Prof. Graefe, for he strongly insists upon the careful inspection of the eye, early, and meeting any untoward symptoms with that same energy one would display under other circumstances. The removal of the bandage in many cases will relieve some of the uneasiness which, sometimes, is due to great pressure upon the ball. Of course one must insist on knowing all the subjective symptoms. Some patients endure pain without complaint. Now if there are pains or even uneasiness it should be known, and the proper measures taken for relief. I generally see my patients in the eve after the operation, and try to find out whether they are nervous or uneasy, if so, in order to secure a good night's rest, I either give a hypodermic injection of morphine, or morphine in the form of the bi-meconate, especially if there is nausea.

Now, if after twenty-four or forty-eight hours, or even earlier, there be present sensations to justify an examination, and this is made, and the eye found to be weak, an increase in the lachrymal secretion, especially if there is any chemosis--serum under the bulbous conjunctiva—or haziness of the cornea, appropriate treatment must be resorted to. The puffiness of the lids may be caused by the atropia, and when I find this symptom alone, I combine with the atropia a quarter of a grain of zinc. If puffi-

ness and haziness of the cornea exist together, I regulate the treatment according to the character of the patient; but usually for constitutional treatment I give some calomel and opium—a grain of the former, half a grain of the latter—till at least three powders have been taken, once every four hours. However, I think sometimes quinine and stimulants are needed from the first, in broken down subjects. As far as local treatment goes there is little to be done except keeping the eye free from any secretions. If there seems to be a strong tendency to suppuration of the edges of the wound, certainly the same treatment would be indicated as is laid down for suppurative keratitis. If a redness of both the eyeball and the lids, with more or less photophobia and lachrymation, continue for two or three weeks, a slight touching once a-day with the sulphate of copper crystal will be followed by the most marked results. I have long felt that insufficient attention has been given to the after treatment of cataract cases; and while it is true that blind zeal only does harm, it is none the less true that well directed zeal does good, and I know that such zeal in the attention of these cases will be followed by the happiest results.

I make use of a very simple, but, I think, very efficient bandage, one that can always be had, and is readily prepared. I have been compelled frequently to use, in lieu of lint, the simple cotton batting, and have become so satisfied with it that I now never make use of anything else. I also apply it directly to the lids, without any intervening cotton. I prepare it by picking off small portions, and gradually building up till I get the socket filled; then put thicker layers till there is sufficient to allow the requisite amount of pressure upon the ball. I seldom resort to any special application of the roller, only making sure that it goes behind the occiput in such a way as to be secure. Of course, the bandage should never be so tightly applied as to produce pain, bearing in mind, though, that it will be more comfortable for the patient not to be able to roll the eye beneath the bandage.

With regard to the position and conduct of the patient, a few words will certainly not be out of place. One of the great advantages of the present operation is, and it is especially fortunate for old people, that the patient can sit up in bed the next day, and, in some cases, if very urgent, can be put into an easy

chair. I find a good many operators are in the habit of confining their patients in a dark room for some days. Now such treatment is not only unnecessary, but absolutely injurious. The light, of course, should be subdued before the patient till it is pleasant, which need be but little, for the bandage is sufficient to ward off most of the injurious effects. In old persons and nervous ones, everything should be done to cheer them, and certainly darkness has usually no such effect; and I need say nothing of it in an absolute sanitary point of view.

STUDY OF UTERINE EXPRESSION AS A MEANS OF DELIVERY.

[Par le Dr. G. CHANTREUIL, Chef de Clinique d'Accouchements de la Faculté, ex-interne de la Maternité de Paris.]

Translated from the "Archives Generales," by T. C. MINOR, M. D.

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Crede, professor of midwifery at Leipzig, understood this perfectly, and it is this which made him propose a new method, founded upon the following reason:

The idea, according to him, was to find a process which permitted the avoidance of the danger of artificial extraction, and the inconvenience of the too prolonged sojourn of the placenta in the womb. Now, from experience we learn that uterine contractions may often be sufficient to spontaneously expel the afterbirth; but this also has been shown to us, that the work of nature is at times too slow and incomplete.

The most logical procedure, the best indicated, should then be that which shall consist in exciting natural contractions, making them more energetic, until such a time as the womb is in a state to fulfil completely the functions which devolve upon it.

This conviction had entered the minds of accoucheurs for a number of years, and that which proves it is that their works contained a series of means destined to come to the aid of nature; but that had been abandoned, because they had not a real efficacy.

Among the means employed we will cite injections of vinegar water into the veins of the cord, the swallowing of borax and tincture of cinnamon, suction of the nipples by the infant, cup-

ping glasses placed upon the breast, the application of a bag of hot sand to the abdomen, the compression of the uterus by means of a tight bandage, injections into the vagina and at the same time into the womb, electricity, etc. Without wishing to deny the action of these means, we are obliged to agree that they are often insufficient, their action being too feeble, too tardy, and too uncertain.

I will cite, moreover, a medicine very much used in these later times for arousing uterine contractions, and which may, in the case of tardy delivery, have a very fatal effect. I wish to speak of ergot of rye.

A means more sure, less dangerous, and also more rapid in recalling and exciting contractions of the uterus, is friction made with the hand upon the base of the womb, and upon its anterior face, across the abdominal walls. In order that this process should succeed, it is necessary to employ it immediately after the accouchement: it fails us when we have recourse to it a long time after the expulsion of the fœtus, or among females exhausted by hemorrhages, or by a bad general state of health.

After Riedel should be Plenck,* who, like the first named, recommended frictions upon the belly in order to expel the placenta; but he advised it only in the case of partial detachment of this body, and in case of hemorrhage, that is to say, in a pathological state.

In 1769 Robert Wallace Johnson, in his "New System of Midwifery," p. 100, made known a particular method of delivery, which consisted in a combination of manœuvres exercised on the one part upon the cord, and the other part exteriorly upon the uterus. "As soon as the cord is cut," says this author, "we must learn the accouchee to place her hands upon the level of the umbilical region in such a manner as to exercise upon the superior and lateral parts of the uterus a gradual pressure. At the same time the accoucheur draws the cord without exercising any traction, properly speaking. When this tension has lasted about half a minute, he ceases to produce it, continuing, however, to exercise a soft pressure upon the uterus, at the level of the hypogastric region. The placenta is expelled, then, in from ten to fifteen minutes after the accouchement. In certain cases the hand of the accoucheur, applied upon the base of the womb

* Plenck, Anfangsgrunde der geburtste. Wien: 1768.

and pressing this organ from above downwards, may replace advantageously the hands of the woman."

Mayer * recommends pressure upon the base of the uterus, in the case where a woman has no more pains after the accouchement. "Under the influence of this manœuvre," says he, "contractions are awakened, the placenta is expelled, and I have never seen a fatal confinement follow the employment of this process."

Other accoucheurs besides have advised the use of these means in particular cases; for example, when there had been retention of the placenta; but it is to Crede that belongs the honor of having generalized this procedure, in applying it to all accouchements, and consequently elevating it to the height of a method. This professor believed in interfering in an efficacious manner in order to expel the placenta, immediately after the birth of the child, as the placenta no longer had any right to remain in the womb. He had resource to a method known under the name of *uterine expression*.

In this process we imitate nature in using not traction, but the *vis a tergo*, developed by external manipulations, bringing it in contact with the walls of the uterus, immediately after the expulsion of the fœtus, we prevent the entrance of air into the cavity of the womb, and also prevent all the dangers that may result from deficient contraction of the uterus. This is the process, slightly modified that Dr. Saussier (of Troyes) employs. He showed the principle of it and the operatory manual in 1862, before the *Société Médicale de l'Aube*.

We learned but recently that Dr. Aubenas, fellow professor of the *Faculté de Médecine de Strasbourg*, has employed this method for many years, both in the hospital and in his private practice, and that he recognizes the serious advantages of it.

The method of *uterine expression* is simple in its principle and easy in its execution. Its purpose being to strengthen the uterine contractions, we must act during the pains and not in the interval; success is much more rapid when we operate immediately after the expulsion of the fœtus; however, we may still succeed a quarter or half an hour after the accouchement, but these are the conditions the most unfavorable.

* Verhandlungen der Gesellschaft für Geburtskunde in Berlin. Jahrg. 2, 1847, § 47.

When the contraction of the uterus has attained its maximum during the first contraction, which it normally manifests after the birth of the infant, we embrace with the full hand the base of the womb, in such a manner that its base and the superior part of its anterior face shall be in contact with the palm of the right hand, placed transversely. The latter exercises from above downwards, and from forwards to backwards a sustained pressure, favored at the point of connection which takes upon its dorsal face, the left hand which augments its action.

We feel, under this pressure, the placenta and its membranes loosen themselves, then engage themselves like a rag across the uterine orifice; sometimes also we see them expelled suddenly from the external genital parts, like the stone of a cherry, which we express between the thumb and the index finger. This is the truthful description of the process, of which Professor Crede (*directeur de la Maternité de Leipzig*) is actually the promoter in Europe. It is under his direction that I made the first deliveries of this sort: I have, following the occasion, seen the same manœuvres repeated at the *Maternité de Prague*, by Professor Seyfert.

On my return to France I stayed the publication of that of which I had been a witness in foreign parts, in order to personally employ this method of delivery, to the end of being able to appreciate it, and to give the results of my own experience.

When I resumed my position as *interne* at the *Maternité de l'hôpital Cochin*, M. de Saint-Germain, who is surgeon of it, permitted me, with a liberality which I can not thank too much, to constantly employ this process, and he himself, each time that he was in the lying-in ward at the time confinements occurred, had recourse to *uterine expression*, and obtained always good results from it. My colleague, Suchard, whom I replaced when I returned to the *Clinique*, two *externes* * and two *sages-femmes* † of the establishment, followed my example, and found no difficulty in the operatory manual of this procedure, by means of which they always succeeded in effecting a complete expulsion of the afterbirth.

We have ascertained in the 540 observations that have been collected, that there was ordinarily a rapid expulsion of the pla-

* MM. les Drs. Peronne et Capet.

† M^lles Blanchet et Gay.

centa and its membranes. Sometimes it is at the moment of the first contraction that follows the accouchement, but more often it is during the second or third that this expulsion takes place.

The following, for the remainder, is the list of the different epochs at which delivery was performed in the numerous accouchements where we have employed this method :

RESULT OF 540 OBSERVATIONS.

Immediately after the accouchement.....	32 times.
1 minute after.....	78 "
2 minutes after.....	175 "
3 " "	109 "
4 " "	50 "
5 " "	47 "
6 " "	20 "
7 " "	4 "
8 " "	4 "
9 " "	0 "
10 " "	11 "
11 " "	0 "
12 " "	0 "
13 " "	0 "
14 " "	0 "
15 " "	6 "
16 " "	0 "
17 " "	0 "
18 " "	0 "
19 " "	0 "
20 " "	3 "
21 " "	0 "
22 " "	0 "
23 " "	0 "
24 " "	0 "
25 " "	1 "
<hr/>	
	540 "

We see by this table that the greatest average is during the first six minutes that go by after the expulsion of the foetus that the afterbirth is expelled.

In the meantime the expulsion of the placenta takes place—

11 times after 3 minutes.

6 times after 15 minutes.

3 times after 20 minutes.

In the last group we find three cases of tardy delivery, *apropos* to which we read in the observation column—

1st. Woman confined, but not delivered at the moment of her *entree* into the hospital. Uterine expression had not then been immediately employed after accouchement.

2d. Woman in whom the contractions were very rare after accouchement.

3d. Woman in whom the contractions were slow and irregular during the travail of the accouchement.

In cases, in effect, where the contractions, and particularly the contractions of the expulsive period are short, slightly energetic, irregular, the delivery by expression is more tardy.

To the contrary, when the expulsive pains have been strong and close together during the latter period of labor, the expulsion of the placenta is almost immediate.

It is the same when manœuvres have been made in the uterine cavity in order to extract the fœtus.

It has seemed to us that the method succeeded more slowly when it was performed in a premature accouchement. The weight of the placenta, which we have noted in each observation, has not appeared to us to have had any very sensible influence as regards the rapidity of the result. According to Crede, the accouchee experiences no inconvenience from *expression*; it is only a very acute pain at the moment of the manœuvre, and altogether comparable to that which is produced by a strong contraction. But there is a great difference between this phenomena and the distension so painful of the genital organs, that we are obliged to produce when it becomes necessary to seek for the placenta in the uterine cavity. On our part, we have besides observed, some time after the delivery, a certain painful state of the womb, which soon disappears, either spontaneously, or under the influence of laudanumized cataplasms, and never ended in metritis.

It is evident that this procedure prevents the rupture of the cord and its consequences, retention of the afterbirth, purulent infection, etc. Deviations and inversion of the uterus can not take place when we no longer use traction upon the umbilical stem.

The regular and energetic contraction of the womb, which follows the rapid expulsion of the placenta, prevents the production of hemorrhage. In the observations we have gathered upon this subject in the lying-in wards of *Cochin*, we have not a single time noticed a case of hemorrhage coming on during or after delivery.

And many times, in the different *services d'accouchements* to

which I have been attached during my *internat* (Maternite, Lavi-boisiere, Cochin), I have been struck by the great number of hemorrhages coming on after classical delivery. I would not, in the meantime, have any one suppose that I believe in the impossibility of hemorrhages after delivery *by expression*; that which I wish only to establish is, that they are less frequent with this procedure than with the others. From the multitude of worthy observers (Crede, Clark, Spiegelberg, Mayer) they affirm that they have not had any hemorrhages since they employed exclusively this method in their *services*. Since that epoch they have no longer observed the cases described in the works on obstetrics under the name of adherent placenta, or retention of that organ, etc., this has so astonished them that they have demanded if these troubles really ever existed. It would seem that the cases which have been described as such are owing simply to the deficient energy of the contractions, in strengthening these latter, we succeed in loosening and expelling the afterbirth, which was neither adherent nor retained.

M. Depaul, in his clinical lessons, has done justice to hour-glass contraction. This professor admits difficulty when the superior part of the body of the uterus contracts itself separately, and forms a cell where the placenta will be retained. According to him, it would be more conformable in practice to explain the form of hour-glass contraction, (described and pictured in the works on obstetrics,) than judging the womb in certain cases by the contraction of the internal orifice. The inferior part, up to the strangulation, will be nothing else than the cavity of the neck enlarged and dilated; the superior part would be formed by the whole body of the organ, enclosing in its cavity the afterbirth, which remains because of the insufficiency of the expulsive force. One may, it is true, object that the dangers of the method actually adopted are due, above all, to the inexact application of the practical means which constitute it, and that one does not take into account the inconveniences resulting from the ignorance of persons who employ it.

We recognize, in part, the justice of this observation; but one will be forced to agree that, in the period of delivery, which consists in drawing upon the cord a certain time after accouchement, if there is something undecided, undetermined, the case is given up to the sagacity and experience of the accoucheur.

We do not know at what precise epoch it is necessary to exercise traction, what force we may employ, what is, above all, the superior limit of this force compatible with the health of the female.

There is, it is true, a good way of preventing oneself from being deceived in not drawing on the cord too soon, that is, touch, it determines whether the placenta is engaged across the neck. But it is necessary, in order to make this diagnosis, to have a certain familiarity with touching. Unfortunately, this habit is not acquired easily; time and occasion have often failed with the physician in perfecting him in this sort of exploration, as the result of his examination is necessarily uncertain. For the remainder, in a goodly number of cases, we have seen that this precaution was completely neglected before one made tractions upon the cord. For midwives, in particular, we believe that it is useful to give them fixed rules in reference to delivery, to the end that their minds may be less disquieted, and their conduct less uncertain during the period that follows the accouchement; we see, with the method of *uterine* expression, that this uncertainty disappears.

Students, in receiving this precept, never draw upon the cord, nor risk the breaking of it, nor the production of uterine inversion, neither the destruction of the placenta by fragments.

To the contrary, with their ideas having actual scope on the subject of delivery, that which remains the most clear, the most striking in the minds of the students who have not devoted themselves a very long time to the study of accouchments, are the *tractions upon the umbilical cord*.

The very variable epoch that we believe fixed at which we should make these tractions; the precaution, so important, that we must take before applying them—which consists in knowing whether the placenta is already engaged across the orifice—are fine traits which efface themselves from the memory; and the best proof we can give of it is, that these tractions are often made too soon or too late: too soon, we know the consequences of this premature intervention, rupture of the cord, uterine inversion, etc.; too late, and from thence contraction of the internal orifice, imprisonment of the placenta in the uterine cavity, etc.

We shall then remedy these accidents by persuading practi-

tioners not to touch the cord, but to replace the force of traction by the *vis a tergo*.

These external manœuvres are much less repugnant to physicians and midwives who are not very familiar with the obstetrical art, than the operation which consists in introducing the entire hand into the uterine cavity, in order to search for the placenta.

This is what happens, in particular, in the case of rupture of the cord; the internal manœuvres which must be made in this case, without waiting too long, frightens them, may be with reason; they wait two hours, three hours, and sometimes longer, relying upon the effects of nature. If nature is powerless, it is then only that they have recourse to other medical confreres more experienced or more enterprising, who find, at the moment of their arrival, excessive and at the same time insurmountable difficulties. The cases we have reported at the commencement of this article are a proof of what we have advanced.

When we speak of the advantages of *uterine expression*, let us say, moreover, that the generalization of the employment of this method would have for a result the active surveillance of confinements by competent persons; preventing the entrusting of this care to women altogether strangers to the obstetrical practice, and attention would be drawn to the necessity of exercising a severe control over the state of the uterus after accouchment. Uterine contractions would be excited, provoked at the same time, in order that the expulsion of the placenta might take place spontaneously.

If these conditions are fulfilled, we easily understand that hemorrhages will be very rare.

I know very well that in all the works on obstetrics we are recommended to watch the womb after accouchement, for fear of an inertia and a distension of the organ by an internal loss; it is evident that this recommendation is often forgotten in practice, and we can give no better proof of this than to cite the cases occurring daily.

Midwives, and sometimes physicians, after the section of the cord and its ligature, abandon the accouchee in order to wipe, bathe, cleanse the infant, sometimes to dress it; when they return to the bedside of the mother, in order to bring away the afterbirth, they draw upon the cord, abandoning it if there is

too much resistance; some time after they use traction again, up to such a period as the placenta shall be brought to the vulva. We can imagine the accidents which may result from this sort of procedure; abundant and rapid hemorrhages may occur during the time the midwife is occupied with the infant without caring for the patient. The employment of uterine expression will cause the disappearance of the habit, for, after the precept given by Crede, the hand of the accoucheur must be applied upon the uterus immediately after accouchement, and must only be withdrawn when the placenta is expelled.

En resums, I believe that this method of delivery, called *uterine expression*, presents serious advantages. I am not, by nature, enthusiastic in regard to new things; but I believe that it is the duty of all physicians to make known that which they believe to be useful in the practice of their art. I desire that they will not decide against this mode of delivery without having employed it, and I shall wait in regard to the subject the result of the experience of my confreres.

This article will not be useless even if it convinces practitioners of the dangers of untimely tractions made upon the cord, and I shall not regret in any way the time I have consecrated to it.

A CASE OF EMPYEMA.

By DR. J. T. DAVIS, Laconia, Indiana.

January 22nd, 1870. Was called to see Dudley K., æt. six years. On arrival I learned the following history of the case: Six weeks previously, while skating, he had fallen into a pond of water, his wet clothing being kept on until his return from school. He was immediately attacked with pleuritis, and was attended by a neighboring physician, who continued in charge of the case up to a day or two before I was called to visit him.

Present condition. Patient greatly emaciated; very poor appetite; pulse feeble; has a troublesome cough; dyspnea, and irritating fever; bulging of intercostal spaces below left nipple; no respiratory murmur on left side; dullness on percussion; considerable displacement of the heart to the right side of chest.

Before giving my treatment, I will here say that the physician who preceded me had told the parents of the child that he was suffering with *heart disease*—that the bulging was caused by the *enlargement of the heart*. He had pronounced the case a hopeless one, and had refused to attend to it any further.

After quieting the fears of the parents in regard to heart disease, I informed them that their boy was suffering with a very serious disease of the respiratory organs, and that in my opinion an operation would be necessary before he could be relieved; as they positively refused an operation, I had to do the best I could with the other means at hand. A poultice was now applied over the bulging for the purpose of causing it to point externally, and by a spontaneous opening.

Internally he was given every three hours

R Tr. ferri chloridi, gtt. xx.
 Quinina sulph., gr. v.
 Potass. chlor., gr. xx.
 Spts. frumenti,
 Aqua, aa ʒss.

M. 'S.—At once.

He was also ordered to have a liberal supply of egg-nog and chicken soup. He was kept on the above treatment for several days, with but little change either way, some days a trifle better, others a little worse.

February 1st. Abscess pointing very slowly; patient very low: continued treatment.

February 9th. Is improving a little; abscess increasing in size, and looks dark and livid: continued treatment.

February 19th. Abscess opened spontaneously to-day, discharging a large quantity of pus, he spits up a good deal of matter, also vomited large quantities of pus. His stool was also mixed with it. Dressed the opening in the chest with a solution of carbolic acid, and gave him some internally, dissolved in glycerine.

Continued the iron, quinine and chlorate of potassa; gave him stimulants largely, and fed him all he could possibly take with safety. Ordered him kept quiet; gave a small dose of morphine to procure sleep at night.

February 22nd. Abscess is discharging freely; feels a little better.

February 24th. More fever to-day than usual; appetite not so good.

March 1st. Better; pus still flowing freely; coughs less.

March 4th. Abscess still discharging; appetite better; his whole condition is improved.

March 24th. Has continued to improve since last date; can now stand on his feet and sit up.

April 30th. Has taken cold and has been worse, but is now better, the cold he took started the abscess to running freely; is taking a tonic, and bids fair to get well.

May 9th. Doing well.

July 13th. Saw this boy to-day as I was passing his father's house, he is now well. There is some depression over the left side, but has increased wonderfully in flesh, and will, I think, in a short time become fully as well as he was before he was first taken sick.

This case, I think, shows clearly the necessity of a more thorough examination on the part of the attending physician, so that such cases may be treated for what *they are*, and not for what *they are not*. All men are liable to make mistakes, but some are pardonable, while others are not. Unfortunately, we have in the profession a good many men who have ceased to read and study; they purchase no new works, nor patronize any medical journal. They are better posted in horse trading and gambling than in the practice of medicine. Now this class of men must not be understood as belonging entirely to irregular practitioners, for the writer knows of several men who have been through the *forms* of an education, who are continually guilty of grossly neglecting their professional studies, and who resort to any low mean device to secure practice, being well aware that they could not compete with men who study their profession, if they took an honorable course.

I think this case is also interesting in showing the importance of *good diet regularly given*, and the constant administration of blood tonics. I believe, also, that the patient was greatly benefited by the internal and external use of carbolic acid and glycerine; and further, that such cases may terminate favorably *without* an operation.

A CASE OF INVERSION OF THE UTERUS.

By J. NEWTON SMITH, M. D., Colemansville, Kentucky.

I was called on, about the year 1845, to see Mrs. S—, a married lady, æt. thirty, who was the mother of several children, and who in the course of thirteen years of married life had suffered from several premature labors.

She had believed for some months that she was again in the family way. And now from a succession of bearing down pains she seemed to be threatened with miscarriage. I prescribed such remedies as I thought advisable at the time, and left her, but was very soon summoned to see her again. She told me that something had been expelled from the uterus. On a digital examination I discovered a polypus, rather larger than a goose egg—with its fundus pressing against the vulva. Upon consultation with her husband, (Mr. S.) we sent to Cynthia for my friend, Dr. I. C. Frazer, a very fine physician. The Doctor came very promptly to my assistance. The neck of the tumor was attached to the upper and inner portion of the cervix uteri, and was about an inch and a quarter in length, and about two inches in circumference, and was of a very firm tendinous texture.

Upon a thorough examination we deemed it best to remove the tumor close up to the os uteri with the knife.

There was no hemorrhage and she seemed to rest pretty well for some hours afterward, and Dr. F. returned home.

After some twelve hours she again sent for me in great haste, and informed me that she had been suffering very much with those bearing down pains, and that something else had been expelled from the uterus. After which time she had again become quite free from pain.

Upon exam. per vag. I found a complete inversion of the uterus—the inverted fundus pressing, as had the polypus, against the vulva. And on introducing the finger I found the neck of the excised tumor lying above and a little to the left of the pelvis, having the whole of the lining membrane of the uterus exposed to view. It seemed to be encrusted or coated with a thick whitish tendinous substance.

It seems that the hard neck of the tumor left within the cer-

vix uteri had caused irritation, as from a foreign substance, bringing on severe uterine contraction, resulting in complete inversion of the organ.

Here was a bad state of affairs, she soon became very much prostrated, a kind of suppurative inflammation supervened, attended with a very copious and most offensive discharge.

The general system seemed to be sinking so very rapidly that I could do nothing but use, daily, and sometimes almost hourly, the most soothing injections, together with such remedies as were necessary to sustain the sinking powers.

Mr. S. happened to be one of the best and most attentive nurses that I have ever met with, and we kept up the washes and injections for about six months. The constitutional symptoms gradually improved, and the uterine inflammation gradually subsided, until the thick white coat having sloughed off, the organ could be handled without pain. After this time she menstruated very regularly.

After one of those periods I applied a ligature by means of a canula around the remaining neck of the tumor, close to its connection with the cervix uteri, and tightened it every day.

On the fourth day the canula dropped off, bringing with it the neck of the tumor.

The injections were continued for a few days, when I determined to try a plan proposed to me by Prof. B. W. Dudley, of Lexington, Ky. It was this:

Introduce the hand and grasp the uterus so as to produce as uniform pressure as possible over every part of the organ, and continue the pressure as long as possible; then press the fundus gently up, and continue the upward pressure until it passed through the os uteri; at the same time pressing above the pubis with the other hand. I commenced and continued the pressure as long as she could bear it, every day or two, always withdrawing the finger as gently as possible, so as to leave the organ as much cupped as possible. Finally, I left her one evening, and told her that I should return in the morning, and that I felt very confident of success.

When I returned in the morning she told me that she had had some uterine pains in my absence, but that she had become quite easy again. Upon examination I found the os uteri in its proper place, the uterus was restored to its normal condition.

The case had terminated favorably, her health was soon as good as usual. In 1849, Mr. S., her husband, died; and in 1861 she married Mr. N——, a very estimable gentleman in this county, and lived with him very happily until her death in the fall of 1868.

I had written out a statement of this case soon after its happy termination, but the lady requested me not to have it published until after her death.

PUERPERAL FEVER.

Read before the Clark County Medical Society. By J. S. R. HAZZARD, M. D., of Harmony, Ohio.

MR. PRESIDENT AND GENTLEMEN:—Notwithstanding the best talent in the medical profession has been brought to bear upon the investigation of puerperal fever, aided by all the facilities that modern invention can afford, the student is embarrassed with so many discrepant opinions, that confusion, absolute bewilderment, rather than any definite conception of truth, takes possession of the mind.

It is not to be wondered at then that *our* views were so discordant, and that after discussing the subject a whole session the question should be raised, What is puerperal fever? The adjective puerperal not only distinguishes it from other fevers, but it is understood to mean that particular condition presented by the recently delivered woman, constituting, as Trousseau terms it, not only a morbid opportunity, but presenting a very remarkable pathological aptitude for the malady. It may not be considered orthodox to state that the whole process of gestation, culminating in parturition, is a pathological condition; but the edict of the Almighty: "In sorrow shalt thou bring forth children," pronounced as a punishment for, and a perpetual remembrancer of, sin, would seem to indicate that the functional action of the uterus in expelling the child is not from any inherent conformation of its structure attended necessarily with pain. In other words, neither anatomy nor physiology can explain why the contractions of the heart or any other muscle are painless, while that of the uterus is always painful. But be this as it may,

the remarkable language of the distinguished Trousseau conveys the idea, that in the parturient woman there is a chain of processes taking place so nearly allied to diseased action, that but an exceedingly trifling exciting cause is required to make them positively pathological.

It becomes interesting then to compare the puerperal condition of the system with the non-puerperal, in order that the morbid opportunity and pathological aptitude may become manifest.

The unimpregnated uterus, except at the menstrual periods, is in a state of quietude, and participates but very slightly in the affairs of the economy; but as soon as fecundation takes place it awakes from its state of hybernation, and suddenly becomes the centre of a high grade of excitement, consequent upon the afflux of fluids directed towards it, freighted with elements necessary for the growth of the germ; and must also impart to it increased volume of structure, so that at full term Meekel estimates that it has increased in solid bulk about twenty-four times.

And here I wish to call attention to the important fact that this increase in bulk is not confined to the muscular structure, but that the serous and mucous membranes, the vascular lymphatic and nervous systems, are all involved in the hypertrophy. The blood also undergoes very important modifications during gestation. The fibrin of the blood rises from three parts to the thousand, in the healthy unimpregnated female, to four and eight one hundredth parts at full term.

The red corpuscles, and also the iron, are diminished during pregnancy, producing, therefore, a chloro-anemic condition of the blood, so that the blood of the parturient female strongly resembles that pathological state known as chlorosis. Other constituents of the blood undergo a change during pregnancy. Thus the albumen is reduced from 70.5 parts, the average quantity in the healthy unimpregnated woman, to 66.42 parts during gestation. The water of the blood is increased from the ordinary standard, 791.1 to 817. parts during pregnancy. The urine also contains ingredients during pregnancy that would be considered abnormal under other circumstances.

In addition to this state of the system consequent upon gestation, the violent muscular contractions, the uterine pain and loss

of blood constituting the parturient effort, draw heavily upon the vital forces, as is evident from the nervous shock, and great fatigue, if not prostration, that immediately follow. And just at this crisis, when the derangement of the blood can hardly be called compatible with health, and the nervous shock and general prostration superinduced by the loss of blood and the parturient effort are the most intense, a new process has been inaugurated, and must be continued until the process of parturition is consummated. I refer to involution or resorption of the uterus. Hitherto the womb has been the center of vital actions that were constantly building up its structure; henceforth, a retrograde metamorphosis takes place that must continue to pull down, until this now superfluous bulk is removed.

During the building process inflammation was guarded against by the diminution of the stimulating constituents, and an increase in the non-stimulating constituents of the blood; and the fat, through this retrograde action, may also exert an important influence in its successful accomplishment, so that nature's object is certainly effected if her processes are not interfered with.

But, if Virchow is correct, fatty degeneration is a pathological condition, and is recognized by all pathologists as such when occurring in any organ other than the recently emptied uterus; but without stopping to discuss this point further, we know that it is a very rapid transition from a highly vitalized structure to the lowest organized cell; and I believe it is within the range of a possibility that if any of the recognized exciting causes of puerperal fever are brought to bear upon the system at this juncture, that molecular necrosis will be the result. And I wish to call your attention to the significant fact that every single cause assigned by authors as predisposing to, or capable of, exciting puerperal fever, is depressing in its effects. Gunning Bedford, after enumerating many alleged causes for puerperal fever, closes the paragraph thus: "In a word, all influences which, from their depressing tendency, are calculated to lower the forces of the economy, may be regarded as predisposing more or less to the disease."

Now it is a well established fact, that gangrene may be the direct result of depression without any pre-existing inflammation or excessive action in the part affected. For instance, an inter-

rupted supply of blood to a part, owing to the inability of the heart to transmit a sufficient quantity to support its vital action, may be a'duced. It may also be produced by certain positively depressing agencies, as excessive cold, and large quantities of ergot. That molecular necrosis does occur under all the circumstances referred to, finds support in the fact that the uterus and its appendages are almost always affected in puerperal fever.

Dr. Churchill says: "I must repeat my convictions, that there are not many cases of puerperal fever without some local disease of the organs employed in parturition, or of the neighboring tissues." He also ventures the opinion that very important changes take place in the womb that may easily be overlooked if the examination be hasty or superficial. But the hypothesis is in no wise invalidated if a careful examination does not detect local lesion in the uterus; for Dr. Copeland asserts that, under certain circumstances, morbid matters or fluids may be imbibed by the uterine vessels, or absorbed from the sexual passages, and carried into the circulation to such an extent as to contaminate the circulation and infect the whole frame without producing any inflammatory alterations of the vessels. And in order to be explicit, he reiterates the same opinion thus:—speaking of the post-mortem examinations he made in 1823, and the years immediately following, he says: "I inferred at the time, and subsequent experience has confirmed my belief, that morbid matters, or altered or putrid fluids, are imbibed, and pass into the circulation without producing any alteration of the vessels that may be recognized by the unaided senses. That molecular necrosis may possibly be the starting point of puerperal fever is strengthened by the fact that the legitimate effect of the various causes supposed to be capable of producing it is depression of the vital forces. I reiterate this proposition because, in connection with it, I wish to apply to the theory I have suggested the facts expressed in propositions two and five of the series of propositions which Dr. Kennedy presented for discussion to the Dublin Obstetrical Society."

Proposition second avers that the poison may be generated by any parturient female, and where the circumstances are favorable may be imbibed into the system of the generator, or that of any parturient female that may be exposed to its influence. Now this harmonizes exactly with the view that I am trying to pre-

sent, namely, that at some point in this retrograde movement—it may be just as the vital force is poised, as it were, preparatory to its retrogression, or perhaps during some of the gradations through which the cell passes in its fatty degeneration, that some untoward influence depresses beyond the point compatible with cell life—one or more necrosed cells become subject to chemical forces, pass into the circulation, and produce all the phenomena of blood poison from the absorption of animal matter.

The blood being contaminated, all the secretions, excretions and exhalations are of necessity vitiated, and consequently generate an effluvium that may be competent of reproducing the disease in the parturient woman, or erysipilas in any one that may inhale it.

His fifth proposition declares that metria, or puerperal fever, is often traceable to other zymotic diseases. This I can accept as true from the stand-point I have taken, without denying the individuality of the different zymotic diseases. The depressing effects of the effluvium from small-pox, measles, scarlatina and typhoid fever, may be sufficient to produce molecular death in the manner already described; but these diseases can never be produced by puerperal fever, however much their malignancy may be intensified by it. Dr. H. Kennedy's remarks are corroborative of this position. He says, the health of the poor, especially in large cities, is always below par, and when epidemic influences prevail among them, parturient women are just the parties to be affected by it. All parturient women are not attacked by metria, because all are not in the same state of health; a really healthy woman will not take metria; an unhealthy one is quite capable of engendering the disease within herself. Only render the health good, and I have the strongest convictions that they will pass through their confinement with safety to themselves, and no risk to those about them.

Dr. Hewitt says it is impossible to escape the conclusion that puerperal fever consists in nothing more nor less than an introduction into the general circulating fluids of a poisonous material of animal origin; that it is a form of pyemia, for the production of which the *minutest* portion of the morbid agent may prove sufficient; that the secretions from the surface of the uterus may become fetid and absorbed, producing the idiopathic form of the disease.

In this connection I think I may venture to assert that our marsh malaria may so depress the vital force that, under favorable circumstances, molecular necrosis may occur in the parturient female, thus accounting for many of our idiopathic and sporadic cases of puerperal fever; and it may also explain its epidemic visitation when all the possibilities of any infectious or contagious origin are ruled out. The examination of the blood of puerperal fever patients reveals nothing by which its origin can be determined further than its disorganized and putrid condition is the result of an animal poison. The products of inflammation are also more or less manifest, varied of course by the structural lesion produced and the occurrence of death. Having adduced the uniform existence of lesion in the organs concerned in parturition as supporting the possibility of molecular necrosis, being the first link in the chain of morbid action constituting puerperal fever, we now call attention to the nature of some of the lesions as not only corroborating the possibility, but establishing a probability.

Tonnelle found, in 222 post mortems, 29 cases of superficial softening, 20 cases of deep-seated softening, and 11 cases of suppuration of the veins and putrescence of the uterus. Dr. Lee found 10 cases of softening in 45 autopsies. Gangrene has been observed by Boer and many other eminent observers. Much that a post-mortem examination reveals is undoubtedly the product of inflammation, whether primary or secondary we will leave for the present *sub judice*; but softening, which is but the first step towards gangrene, and gangrene, which is frequently observed in the uterine walls and its investing membrane, may be the direct result of depression, as has already been shown.

Dr. Copeland says, many of the changes found after death from puerperal fever are the undoubted consequences of inflammation; but *others are the results of a very different state of vital and vascular action.*

The same author says, softening may take place during life from impaired organic nervous power of the part, causing impaired nutrition, sometimes with serous infiltrations, or with a certain amount of fatty degeneration.

And again, the same author, speaking of gangrene arising from local or general debility says, the gangrenous or asthenic form of furunculi, and the humid or phagedenic sores met with

in the mouth, gums, cheeks, genitals, etc., of unhealthy children, are all illustrations of this variety, the chief characteristics of which are depressed organic nervous or vital power, imperfect or asthenic vascular action, both previous to and attendant upon the gangrenous lesion, and a poor or vitiated state of the circulating fluids.

Now, I conceive this to be strong testimony in behalf of the theory that I am endeavoring to develop, for every factor necessary for the production of softening and gangrene obtains in puerperal fever. Thus we have the impoverished and otherwise altered blood in the parturient female connected with the depressed nervous force consequent upon the parturient effort, affecting the system generally, and, engrafted upon this semi-pathological condition, a retrograde metamorphosis is set up in the uterus, impairing its vitality, so that the nutrition of its cells is interrupted; and whilst the economy is staggering under this general and local depression, the effect of some powerful depressing agent is superadded, the general life-force is brought to the minimum point, more or less of the uterine cell structure dies, and therefore, unable to offer further resistance, passes into the circulation, and sets in motion a chain of action, whose manifestations or symptoms are called puerperal fever.

From what has been said, this view of puerperal fever contemplates whatever inflammatory action may arise during its progress as being secondary. The passage of dead matter through the lymphatics and veins into the circulation may excite inflammation in many cases, why it does not in every case I am not able to explain; but that it does not I have shown from good authority.

And I suppose Dr. Churchill entertained the same opinion in regard to any concomitant inflammatory action. He says: "If any one will carefully compare a case of simple inflammation of the womb or peritoneum in childbed with a case of malignant epidemic puerperal fever, their symptoms, general and local characteristics, course, and the effect of remedies, they will be obliged to come to the conclusion that, although the latter may exhibit local disease, it is not exclusively or primarily a local affection."

Furthermore, this view of puerperal fever does not suppose that a peculiar *materies morbi* is generated, self-limited, and ca-

pable of reproducing itself in the same sense that smallpox and scarlatina are perpetuated; but that its noxious secretions and exhalations are capable of deteriorating the blood under favorable circumstances, in whatever manner they may be introduced. Hence we are able to explain the cause of so many infants dying of erysipelas during the prevalence of puerperal fever; and hence also are we prepared to understand how it establishes its habitat in crowded lying-in hospitals, a fact so ably exposed by Dr. E. Kennedy. In short, every variation and modification observed in puerperal fever can be rationally explained from this standpoint.

FETAL MALFORMATION.

By DR. T. J. DENNY, Lusby's Mills, Ky.

On the night of the 9th of June Mrs. S. was delivered of a most singular monstrosity. It consisted of a fœtus, a seven months' gestation. Its head, body and upper extremities were natural, with the exception of the ears, one of which was an imperfect human ear, the other an exact resemblance of the ear of an opossum. Over the region of the sacrum was considerable ecchymosis; its hips were perfectly natural, but it had no legs, nor any sign of any lower extremities except an appendage about eight inches long, resembling the tail of an opossum. It also had a nail, similar to a finger nail, on the end of its tail; it had no anus nor external genitals. It was alive when delivered, but died in a few minutes. The labor was short, and the lady seemed to do as well as usual until the 12th, when, while at stool, she was delivered of a large substance, which was at first thought by her nurse to be coagula, but on examination it was found to consist of a shut sac, enclosing a fleshy mass, having the appearance of a chick when near the close of incubation; the head and eyes and all the appendages of a chick were present.

In my mind the history of the case accounts for the first, but for the second I am wholly unable to assign any reason.

The lady is about thirty years of age, healthy and well developed, of a sanguineous temperament. It was her first

confinement. At about two weeks of gestation, some boys, having been in the woods with their dogs, came upon an opossum, and wounding the animal, carried it in this condition and left it near the door of Mrs. S.'s room, and she, discovering it there unexpectedly, became frightened, noticing at the time a considerable wound on the animal's back, corresponding exactly with the ecchymosed patches on the fœtus.

She told me that the affair seemed to take unusual hold on her mind throughout the whole of her pregnancy, yet she had no unusual symptoms more than that she never experienced quickening, except a mere pulsation.

I have given this case considerable reflection; the first I consider the result of maternal imagination on the fœtus in utero; but the second, as I said before, I am unable to form any definite solution of.

HYPODERMIC ADMINISTRATION OF MEDICINAL AGENTS.

By WILLIAM A. GREENE, M. D., Americus, Ga.

I have been using hypodermic injections for several months with the most satisfactory results. But having no data to control me in doses, and no experience as to the remedies best adapted to this mode of administration, my progress has been necessarily slow. But if I should never make further progress, I am fully remunerated for all my trouble. I now enter the chamber of *suffering, knowing* that I have in my possession an *unfailing* remedy for *pain*. "Relieve me of my pain, doctor," is the cry of the sufferer. With a hypodermic syringe, this agonizing cry can be promptly, and without injury, hushed.

I have employed hypodermic injections in all forms of neuralgia—both local and general—in hysteria, wakefulness, delirium tremens, rheumatism, gout, threatened miscarriage, puerperal peritonitis, fever, painful affections of the nerves, caused by injury; and in all cases where pain calls for immediate relief; and when its employment for some potent reason is not contra-indicated. I have not time to give my experience and results in the treatment of all these affections by the hypodermic method, and will therefore give practical facts.

The medicines I have used, with their doses, for a single injection, are as follows:

Morphiæ Acetas, from 1-6 to $\frac{1}{2}$ grain.

Atropæ Sulphas, from 1-60 to 1-30 grains.

Liquor Opii Comp. (Squibb's) from 5 to 60 drops.

Veratrum Viride (Norwood's) from $\frac{1}{4}$ to 2 drops.

Sulph. Quinine, from 3 to 8 grains.

Tr. Cannabis Indica, from 10 to 20 drops.

I make it a rule to begin with a minimum dose, establish a point of tolerance, and increase the number of drops as circumstances require. For general use I prefer Dr. Squibb's comp. liquor of opium, which contains one grain of Morphia to one hundred drops of the medicine, but the *anodyne* effects of which are equal to officinal laudanum; the minimum dose is five drops, and can be extended to sixty drops at a single injection. I find it less apt to produce nausea than any of the preparations of opium, and can be borne by the most delicate female.

To produce a quicker and more powerful effect, I employ the following solution of acetate of morpha :

R—Acetate Morphia,	-	-	gr. xxiv.
Dist. water,	-	-	3 i.
Acetic acid,	-	-	q. s. m.

Inject from five to ten drops.

If I wish to produce a *still more* speedy and powerful effect, I combine with the dose of morphine a few drops of solution of atropia, as follows :

R—Acetate morphia,	-	-	gr. i.
Dist. water,	-	-	3 i.
Acetic acid,	-	-	q. s. m

Inject from three to eight drops.

Atropia is a very powerful drug, and must be used very cautiously. While the morphine and atropia act well when combined, yet one is an antidote for the other. For instance: if you inject an overdose of the atropia, you can counteract its effects in a moment with an injection of morphine; and *vice versa*. This is very singular but *true*; (and should be remembered;) for I have frequently given an overdose of each, not knowing how much my patient would tolerate.

The tr. verat. viride must be used *very cautiously*. My friend Dr. G. F. Cooper, of this city, injected in the arm of a young man, suffering from ordinary fever—pulse 112—three-fourths of a drop of veratrum and four and one-half drops of the solution of morphine, which produced distressing nausea in ten minutes, and its full constitutional effects in twenty minutes; and no more was given or required during that paroxysm of fever.

In a case of profound coma, under my care, following a congestive chill, I injected two drops, which produced violent vomiting in five minutes, and full constitutional effects in fifteen minutes. The patient was a strong and robust youth of 18 years. He was completely relieved; and, with a large dose of quinine, recovered in a few days. I believe, when tested, that veratrum will prove a most powerful auxiliary in the treatment of neuralgia, injected under the skin at the *painful point*.

Sulphate of quinine acts powerfully in doses from three to eight grains. I use the following solution :

R—Sulph. quinine,	-	-	grs. xxx.
Sulph. acid,	-	-	gtt. x.
Water,	-	-	℥ ss. m.

Tr. cannabis indica acts well in doses from ten to twenty drops. I have but little experience, as yet, with it.

From my experience, the hypodermic administration of medicine commends itself above any other method, for the following reasons:—

1st.—The amount received into the system is accurately known; every particle that is *injected* is *absorbed*; which is not the case in stomachic doses. For instance: if we introduce one-sixth of a grain of morphine beneath the skin, the effect that follows is that of the whole one-sixth; but if the same quantity is introduced by the stomach or rectum, the effect produced is only equal to the quantity *absorbed*.

2d.—*Rapidity* of absorption is a great advantage of hypodermic injections. For when introduced through the stomach, remedies have to pass through the *portal system* before reaching the general circulation.

3d.—There are no circumstances under which it can not be administered when indicated. Because the medical agents *taste* badly, are nauseating or bitter, or the patient being delirious, refuses medicine altogether, or is unable to open his mouth or move the jaws, as in tetanus, *we can inject it under the skin*.

4th.—We get a local and general effect at the same time, which makes it particularly advantageous in neuralgia, where we have both a local and a general disorder.

5th.—Persons who will not tolerate any of the preparations of opium by the stomach, will receive it kindly, and bear it charmingly when introduced subcutaneously. This *alone* should recommend it to the attention of every physician, as of incalculable value. And, again, the constipation and head symptoms, which usually follow the internal administration of the drug, are not to be apprehended. I will here mention two cases as demonstrating this point:

CASE 1.—Rev. A. A. Robinson, of this city, age about fifty, had his thigh fractured at middle of upper third, Dec. 10, 1866. After Liston's long splint had been applied, and I had left him, thinking he would rest well from the chloroform he had taken, until I should see him again, he became restless, and was suffering so much, the nurse administered about one-quarter grain of morphine by the stomach, which produced excruciating pain in the region of his stomach, violent nausea, and great nervous derangement, which he informed me was the invariable effect of any of the preparations of opium upon his system, when taken by the mouth. As soon as I reached his bedside, I introduced under the skin of his arm ten minims of the solution of acetate of morphine, which brought complete relief in ten minutes; and

he rested quietly for the next twelve hours. His peculiar nervous disposition, and circumstances surrounding him at the time of the accident, (being upon the eve of removing to another State,) made him unusually restless and impatient, and consequently, illy prepared for the quiet and composure required for a good recovery. Under these circumstances it became necessary to administer the hypodermic injections daily, sometimes morning and evening, for five weeks. During all this time there was no unusual constipation, no nausea, no loss of appetite, no unpleasant head symptoms, no *colic*, nor anything to retard a natural recovery from such an injury. Smith's Anterior Splint was used after the inflammatory symptoms subsided; and there was no *shortening*—a most fortunate and happy result, attributable to the quiet and rest produced by the hypodermic injections. He could not bear opium or any of its preparations by the stomach; and his suffering must have been very great, coupled with a bad recovery, but for the hypodermic injections; and so convinced was he of this fact that he would not leave for his new home in Southern Florida, until a hypodermic syringe was ordered for him, and he instructed in its use.

CASE 2.—Mrs. —, age twenty-five, of this city, was suffering from acute articular rheumatism, and when called to see her, remarked, so soon as I entered her room: "Doctor, you must not give me opium: it makes me crazy, and vomits me all next day." The disease was located in her wrist and fingers of her right hand, and had resisted counter-irritants, blisters, and the usual general constitutional treatment for several days. The great pain and loss of sleep for several days had produced much prostration. I at once injected under the skin of the affected wrist twenty minims of Squibb's liquor opii comp.; and in ten minutes she was relieved of all her pain; and in twenty minutes was in a sound sleep, which lasted twelve hours. She awoke much refreshed; and the injections were continued at lengthened intervals—at same time giving her colchicum and iron for ten days—when she was dismissed, cured. The prompt action of occasional saline cathartics was not interfered with by the injections; neither did she *know* that she was taking *opium*.

6th.—Finally the remedy can always be at hand. The syringe is in a case, which contains a drachm vial, and can be carried in your vest pocket. No physician should be without one. The day will come when every physician will carry his hypodermic syringe and morphine solution as religiously as our respected fathers *once* carried their lancet. What an amount of suffering could have been saved in our late war, if the hypodermic administration of medicine had been generally known and used. Side by side with the discovery of chloroform, and its adaptation to practical purposes, should be placed the man who first introduced to the notice of the profession this mode of the administration

of remedial agents. In America this credit is due Dr. Antoine Rupper, of Boston, whose indefatigable labors have enabled him to present to the profession a neat little work on hypodermic injections; and from whose writings upon the subject I received my first impressions, and from whom I have drawn largely for the views contained in this communication. The afflicted of every section will "rise up and call him blessed."

The instrument I use is made by Tieman and Co., of N. Y., and consists of a graduated glass barrel, with a brass screw piston, though so arranged that it can be worked as an ordinary P. P. syringe. A *two drachm* syringe is the most convenient size for ordinary purposes. Accompanying the syringe, in same case, are two hollow needles, which ought to be very sharp. The finer the needle the better, for obvious reasons.

The operation is simple. Take hold of a fold of the skin with the left index finger and thumb, so as to make the part beyond the fingers *tense*; then pass a needle through it with a quick movement. Throw in the solution slowly, and press the finger gently over the puncture for a moment after withdrawing the point of the syringe, so as to prevent the escape of any fluid, and to prevent bleeding. My friend, Dr. Geo. F. Cooper, of this city, suggests that the *point* be allowed to *remain* introduced under the skin, and the syringe detached, in cases where we are not well satisfied as to the dose required to produce the required effect, so that said dose may be *increased* without having to *re-puncture* the skin. This is a good suggestion, since it saves the patient the pain and fear of a second puncture; and we have to wait but a few moments to settle the question.

There is a diversity of opinion as to the *point* of injection—whether at the *painful point* or any other point. Some benefit will be experienced by introducing the medicine *anywhere* in the cellular tissue. I have not time to enlarge here; but my own experience is in favor of *localisation* of the injection, especially neuralgia. I think it requires a smaller dose; and the effect is much more satisfactory and permanent.

In introducing the instrument, great care is required not to pierce a bloodvessel or wound a nerve. A correct knowledge of anatomy and caution will prevent any accident of this kind. Neither should the same point be punctured *twice* in succession—but immediately above it or below it. Frequent punctures at the same point endangers abscess. Vomiting results from an overdose of the preparations of opium or atropine. This you will control easily with sul. nit. bismuth, or oxalate of cerium. I prefer the latter.

I will bring this hastily written article to a close, by stating a few cases, from my note-book, treated with hypodermic injections. For my own justification, I feel it my duty to state that this communication has been written under pressing professional

engagements, and with an honest desire that the attention of the profession may be directed to this new and unexplored field of medicine, that promises such happy and beneficial results.

CASE 1.—Mrs. P., of Americus, Ga., aged forty, mother of several children, consulted me 1st of December, 1866, for severe neuralgia of the face and head, of twenty years' standing. Pain confined to the left side, extends to the sagittal suture, of a dull, heavy nature, almost constant, but at one time more severe than at another; has lost the sight of the left eye from amaurosis several years since. She also complains of a circumscribed pain around the ear. The lachrymal branch of the ophthalmic division and the potio dura is evidently involved.

She had taken and "worn out" quinine, morphine, strychnine, valerian, iron, and, in fact, the catalogue of neuralgia remedies. I advised the hypodermic injection. She did not consent to it until December 25, when I was sent for. I found her in one of her most painful paroxysms: I injected fifteen drops of the solution comp. liq. opii at the palpebral point, and in ten minutes Mrs. P.—was at ease.

Five days afterwards the operation was repeated; again four days later; and occasionally afterwards at longer or shorter intervals, as her pain required, for six weeks, the patient taking at same time the hypophosphite of soda, in drachm doses, three times per day, and citrate of iron and strychnine in proper doses.

No return of neuralgia at present date of writing—March 28, 1867—being her longest period of relief since her attack. Her general health was much better, and fast improving. Although sufficient length of time has not elapsed in this case to test the permanency of relief, yet enough has been achieved to warrant the assertion that if she is not *cured*, her disease is at least so much mitigated as to make her life tolerably comfortable, with a strong hope and good prospect of permanent relief. I shall watch this case with much interest.

CASE 2.—Mrs. —, of this city, aged twenty; nervous temperament and very excitable; six months gone in pregnancy with first child; sent for me December 18th. 1866, in great haste, the messenger stating she was threatened with miscarriage. Arrived in her room ten minutes before eleven o'clock, P. M. Found her suffering with severe bearing-down pains at intervals of every five minutes.

At eleven o'clock introduced ten minims of solution acetate morphine, at the insertion of the deltoid muscle of right arm. In fifteen minutes, said she felt *very comfortable*, and in fifteen minutes more was sound asleep. She awoke at two o'clock, complaining of slight pain, when I introduced five minims more of the solution, and I left her. I saw her no more until 11th March, when I was summoned to attend her in labor. After a painful and tedious labor of thirty hours, she gave birth to a large child.

Three days after her delivery, she was violently attacked with puerperal peritonitis. All the pain of this terrible disease, in her case, was completely controlled by the hypodermic administration of comp. liq. opii, whenever required, which in no wise interfered with the proper treatment. She is now out of danger (March 23d), making a rapid recovery, and suffered less than any patient I ever treated without the hypodermic injections.

This lady could not take, in any quantity, any of the preparations of opium without the most distressing vomiting and wakefulness. My friend, Dr. Cooper, visited this case with me, and witnessed the charming effects of the remedy.

I think this a most interesting and instructive case.

CASE 3.—Mr. —, aged thirty, of small stature, nervous temperament, consumptive, addicted to drinking; had suffered from an attack of delirium tremens for two days when I saw him. He had suffered frequently from the disease.

Morphine, valerian, chloroform, and veratrum had failed to control his delirium. He would not go to bed; attempted to move away from his friends; refused to allow me to examine him in any way; swore the house was on fire, and the devil was trying to throw him into it, etc. etc. I found persuasion useless. I had him confined, and introduced at the first point I could (which was the top of his shoulder,) a mixture of ten minims of the solution of acetate of morphine and five minims of the solution of sulphate of atropia. In fifteen minutes he complained of feeling tired; was put to bed and went to sleep; once or twice made feeble attempts to get up, but was easily controlled.

In three hours repeated the operation without the atropine.

Heard no more from him for three or four days, when I saw him on the street.

There is no physician who does not dread the annoyance of a case of delirium tremens. Well, you need have no further dread if you will provide yourself with a hypodermic syringe. I have treated several cases with the above gratifying result.

CASE 4.—February 13, 1867, I was called to visit Mr. G—, two miles from town; he is twenty-two years old, well built, and regular habits; found him suffering excruciatingly from bilious colic of three hours' duration; he had been freely vomited with mustard; had taken laudanum, morphine, chloroform, whisky, etc., to no purpose. His friends thought he must certainly die. I at once introduced twenty minims of comp. liq. opii, and five minims of solution of atropine in the arm. In five minutes considerably relieved, and in ten minutes completely at ease. Directed three comp. cathartic pills at bed time, and left him. He was attending to his business next day.

CASE 5.—Was called to see Mr. S., of this city, January 15, 1867; he is thirty-eight years old, strong and robust; found him suffering from an attack of remittent fever; most intense

pain in head, back and limbs; very irritable stomach and great restlessness; pulse 130 and full; thirst very great, but vomits every time he attempts to take water; has complete disgust for medicine, and is clamorous for relief. I confidently promised to put him at ease in a few moments. I injected twenty minims comp. liq. opii under the skin of his arm, and in twenty minutes pain was charmed away, and sleep came when least expected. The stomach received and appropriated the remedies; strength was not made subordinate to debilitating measures, and convalescence was more rapid than ordinarily.

CASE 6.—Mr. R——, of this city had suffered for several months from bone felons and carbuncles. He consulted me Dec. 18, 1866—suffering from a palmer abscess of the right hand, and a carbuncle on the back of his neck. He was in a distressed condition; was emaciated and anæmic from frequent attacks of chills and fever; had not been able to sleep for several nights; said he had been “cut so much” he could not again submit to it; and was afraid of chloroform, because he was a consumptive. I advised him to submit to the required operation under the influence of the hypodermic injection of morphine, which I thought would at least make the pain bearable. He agreed to it; and I injected ten minims of the solution of morphine and five minims of the solution of atropine under the skin of the back of the affected hand. In five minutes he was so much affected as to be put to bed. I immediately made a deep incision through the palmer fascia, turning out a considerable quantity of pus; also, at same moment, opened carbuncle on back of neck. He manifested but little pain or concern for the operation. Sleep was irresistible, which lasted several hours. He awoke considerably nauseated, which was speedily silenced with half grain of acetate of cerium.

I have had no other opportunity of testing the efficacy of hypodermic injections in relieving the pain of minor operations. In this case it certainly acted well, and if I had waited until my patient was sound asleep, I doubt if he had felt the pain at all, as the pressing, syringing and dressing, after he was asleep, did not disturb him.

It will be found invaluable in relieving pain and nervous irritability in all surgical accidents. It has also been found to prolong the anæsthesia from chloroform. I now invariably inject from one quarter to one half grain of morphine, when I expect my patient to be continued under chloroform for a length of time. The attention of the profession is respectfully called to this fact; and I hope those having larger opportunities than myself will test its efficacy and report their experience to the profession.

This article has been unintentionally spun out to an uninteresting length. I only hope to call the attention of my profes-

sional brethren to this interesting and important subject; and if they will only try it, I have no misgivings about their experience coinciding with mine. Its field of application is not limited now, as formerly, to the various forms of neuralgia; but its usefulness has been demonstrated in various other diseases, thus opening up a most extensive field for investigation.

ACTION OF THE REGULAR MEDICAL PROFESSION ON THE DEATH OF DR. GEORGE C. BLACKMAN.

The called meeting of the regular medical profession for action on the death of Dr. George C. Blackman was very largely attended, in the meeting-room of the Academy of Medicine, on College Street, Friday morning, July 21, nearly all the prominent physicians and surgeons of the city being in attendance.

Dr. J. L. Vattier was called to the chair, and Dr. J. M. Tucker was appointed Secretary.

Dr. Vattier, on assuming the chair, said that it was very well known by all present that this meeting had been called for the purpose of paying a last tribute of respect to their departed friend and colleague, Dr. George C. Blackman. In the death of Dr. Blackman, the profession, the community and the state—not only the state, but the entire western country, throughout which he had great reputation, as well as in the east, had sustained an irreparable loss. I apprehend, he said, we shall not soon be able to supply the vacancy created by his departure. I knew Dr. Blackman probably a short time longer than any man among you. He came here partly through the influence of correspondence which I had with him, in connection with others. He came here backed by the most distinguished medical writers of the east, who spoke of him as an extraordinary man. Upon his arrival here he became an applicant for the position of professor of surgery in the medical college of Ohio. He obtained the situation. With what success and efficiency he filled the position you all know. He has filled the place better than any other man could have done. He was an extraordinary man, not only on account of his skill in surgery, but also on account of his wonderful knowledge of the literature of the profession. He could gather up facts connected with his profession more rapidly and more correctly than any man I ever knew or saw. He would take hold of a book and tell you what was in it, with less degree of trouble and labor than any man I ever knew. It seemed to me he could tell what was in a book by looking at the covers. I knew him socially. I was acquainted with him, I may say intimately acquainted with him, up to the time he took up his residence in Avondale. He was a man of great heart. I believe he was an honest man; I believe he was a truthful man. I believe he would fulfill any obligation he undertook, whether it was by word or by writing. I know this to be a fact from my own operations with him. I believe we shall not look upon his like again very soon.

RESOLUTIONS.

On motion, the chair then appointed the following committee on resolutions: Drs. T. H. Kearney, W. H. Mussey, W. W. Dawson, C. F.

Thomas, J. J. Quinn, J. Rosenfelt, C. G. Comegys, T. G. Orr, James Graham, and Dr. Bonner, sr.

The committee retired for a brief period, and upon re-entering the room, Dr. T. H. Kearney, Chairman of the Committee on resolutions, read the following:

"Whereas, It has pleased Almighty God to release from his earthly labors our professional brother, Dr. George C. Blackman; therefore

"Resolved, That in the death of Dr. Blackman the profession has lost a brilliant, cultivated and high-toned member; the community, a valuable citizen; and we, who are now assembled to honor his memory, a genial and true hearted friend and enlightened counselor.

"Resolved, That we tender to his bereaved family the assurance of our sincere condolence and sympathy with them in their affliction.

"Resolved, That the proceedings of this meeting be published in the daily papers and medical journals of this city."

REMARKS.

On the motion to adopt, Dr. Muscroft addressed the Chair. He knew it was not customary to speak in disapproval of resolutions upon such an occasion, but he really felt that, while these resolutions were good enough as far as they went, they were nevertheless inadequate.

No one in the profession had done so much for it as Dr. Blackman, and he thought there should have been a larger expression. Dr. Blackman deserves more. Pages could not tell all his worth, and he hoped that something would be added to fill out the meager expression reported by the committee.

Dr. Gobrecht entirely accorded with Dr. Muscroft. He had been considerably in contact with Dr. Blackman, and it might therefore be supposed, because he was associated with him, that he had some interest in desiring a more full expression by this meeting; but he had no interest more than the desire to honor the memory of the distinguished Professor. Dr. Blackman, he said, was an emotional and impulsive man, large-souled and warm-hearted, and one of the very best operative surgeons in the country. He really thought that something stronger should have been reported in the way of resolutions.

The Chair suggested a second reading of the resolutions. To be sure they were short, but he thought the language was strong and meant a good deal.

The Secretary read the resolutions.

Dr. Comegys wished to say a word for the writer of the resolutions. The fact was that no one else on the Committee had come prepared, and, when the resolutions were submitted by Dr. Kearney in committee it felt that they expressed enough for a man who had so distinguished himself as Dr. Blackman had—a distinction that really needed no addition that the Committee could make. The Chairman of the Committee had spoken the words of his heart, but would doubtless be glad to have his report amended, and so would the Committee, if the meeting so desired.

Professor Wm. H. Mussey approved the resolutions. Words merely were not desirable, and he believed the expression sufficient. A few words convey a great deal of meaning. Everybody will recognize this if the Scripture text is only called to mind that "Jesus wept."

Professor Mussey then passed to a brief review of his professional

knowledge of Dr. Blackman. He had known him ever since he came to Cincinnati; had boarded in the Burnet House with him during his early days here, and they were friends. As a surgeon, he lacked symmetry of character; as an operative surgeon, he was without an equal, and as a model in the profession, he could heartily commend him to young men. The speaker never knew a man so well posted in the literature of the profession—all it contained was at his tongue's end.

With regard to the spiritual side of Mr. Blackman's character, he ad to say that he knew him several years ago to express concern regarding his eternal future. He had agreed with the speaker that his life is one of change and uncertainty, and that there is a life beyond. Quite lately he spoke of having undergone a change of heart, and only a day or two before he died he said he had made his peace with his God, and felt that he was ready to die.

In conclusion, Professor Mussey bore a cheerful testimony to the greatness and generosity of Dr. Blackman's character.

Dr. W. W. Dawson followed. He said that at a comparatively early age Dr. Blackman was a surgeon of distinction, not so much for the operations he had performed as for his love of the pursuit and his cultivation of its literature. After removing to this city, with absolute control for several years of two hospitals, he had a fine field for the prosecution of that part of his profession to which he was so deeply attached. With what enthusiasm he cultivated operative surgery in these two institutions we all can attest.

As an operator he was bold and expert; he used the knife as if he had been born with it in his hand.

In diagnosis he was unusually quick, he comprehended at once the prominent, the leading points in a case. His perceptive faculties, although not acute in many things, were, when applied to external pathology, almost unerring.

As a surgical writer he will be known for his translation of Vidal's work on venereal disease, for his edition of Velpeau's Operative Surgery, and for many valuable contributions to the periodical literature of the profession. It is to be regretted that he has not left some collection and digest of his own surgical experience.

As a man he had good impulses, and in defending a professional brother in trouble he showed tenderness of heart and generosity of purpose.

He dies in the midst of life—in what should have been the vigor of his manhood. Dickens, at Thackeray's grave, said, "He died at fifty-four—so young a man that the mother who closed his eyes in his first sleep closed them in his last." So it might have been with Geo. C. Blackman.

Dr. Graham was here called to make some remarks, and in response said that he had not expected to speak. He came to listen, but he would not refuse, now that he was called, to speak. He knew Dr. Blackman long, and he knew him well, and perhaps the very best thing he could say for him was that, from the very first hour to the last of their acquaintance, he never had a quarrel with him. He saw him in his strength and in his weakness, and it was always a question in the speaker's mind if the weakness of his moral and passiona nature was not an element of success in his professional career. The strong, impulsive, combative nature of the man, trained into use by his unquestionable genius, made him what he was—immensely great

in his profession. Dr. Graham then spoke of the tenderness of Dr. Blackman's heart. He said it was a mistake to suppose that he delighted to use the knife. On the contrary, he could not bear to think of inflicting unnecessary pain, and it really was the hope of imparting benefit to the patient that nerved him to the work of surgery. In support of this view, Dr. Graham instanced the occasion of Professor O'Leary having a dog brought into the Medical College to demonstrate a venesection. Blackman heard the dog howl, and, touched with a sense of the poor dumb animal's pain, he flew into a passion, and avowed if the dog was not set at liberty he would leave the college. He could not bear to have a chicken killed on his place; and, indeed, taking him for all, and making all due allowances, there was no greater or better man in the profession.

Dr. Kearney next spoke. It was his good fortune to have known Dr. Blackman for many years, and he could heartily indorse all that had been said in his praise. With regard to the resolutions, he fully concurred that they were meager, and he hoped that something better had been prepared. He would be glad if any desirable addition were made.

Dr. Muscroft again arose. He desired to pay his tribute of respect, and, after taking a cursory view of the life and career of his deceased friend, said that he did not think he had an equal in the world. Speaking of his ability as a surgeon, he said that he was wonderfully successful in plastic operations. He operated with a boldness and skill that nothing could approach. His only fault as a surgeon was that he did not care much to watch his cases after operating. The process of healing he took little interest in, but at the same time felt an interest in his cases until the normal condition was restored.

On motion of Dr. John F. White, the resolutions were adopted unaprimously.

On motion, it was resolved to attend the funeral of Dr. Blackman in a body.

The meeting then adjourned *sine die*.

EXPRESSION OF THE FACULTY.

"The Faculty of the Medical College of Ohio would in this public manner give expression to the great loss which the College has sustained in the death of their distinguished colleague, George C. Blackman, Professor of the Principles and Practice of Surgery.

"They would also add their tribute of reverence to the surgeon whose consummate genius commanded the admiration of the profession alike at home and abroad.

"To the family they tender their profoundest sympathy.

"Jno. T. WHITAKER, Sec'y.

JAS. GRAHAM, Dean."

FUNERAL OF DR. BLACKMAN.

The funeral of Dr. Blackman took place Wednesday, July 21, at 2 o'clock in the afternoon, from the Avondale Presbyterian Church.

The church in which the services took place, a neat, brick edifice, was handsomely decorated with a profusion of white flowers, intertwined with drooping vines of various kinds.

Upon the arrival of the remains at the church the choir sang an appropriate hymn, which was followed by the reading of some passages from the Scriptures, and a prayer by Rev. W. J. McKnight, who stated that owing both to the brevity of his acquaintance and

ignorance of the profession, in which Dr. Blackman was so eminent, he had requested his professional friends to designate some one from among them to deliver an address on the professional character and life of the deceased. In compliance with his request, Dr. M. B. Wright had been selected.

ADDRESS BY DR. M. B. WRIGHT.

Dr. Wright said: I accepted the kind invitation to appear before you on this occasion reluctantly, not that I felt no interest in the character of the deceased, or an unwillingness to aid in perpetuating his memory, but for the reason that I had not sufficient time to do justice to my subject, and, again, because there were others who held a more ready and graphic pen.

It has been my mournful duty to present, publicly, the characters of Lock and Harrison, former colleagues, Latta, a personal and professional friend, and now I am to talk briefly and hurriedly—too briefly and too hurriedly—of Blackman.

Others, honored by the profession and people, have recently fallen, and may we not profitably ask, who next? Who next?

Are appearances to indicate the answer? Is it he who carries the marks and gives the faltering step of age? Is it he with delicate frame and pale cheek—the tendrils of whose life contain the seeds of fell insatiate consumption? Is it one, or all, of these on whom rests the claim of the King of Terrors? Not exclusively. The young man who has just gone out into the field of action, full of mental energy, and without a visible cloud to darken his future prospects, may have all his laudible aspirations speedily ended. Even now, the arrow may be ready to leave its quiver. Does the sturdy man, with the arm and muscle of the athlete, fancy that he can disobey nature's laws at will, and come off victorious? It is impossible. The forest oak, hardened by time, which may have resisted a thousand tempests, will be shivered by the thunderbolt sent for its destruction.

When I heard Dr. Blackman say, in tones that seemed to come from the bottom of his soul, "Dying, dying!" and saw the upheaving of his enlarged frame, I fancied that there was being represented before me the rendering asunder of a great mountain, by the angry volcano that had been slumbering beneath. The mandate had gone forth. Death, garner thy sheaves! and the light of life was extinguished—an immortal soul had taken its flight from a decaying body.

I need not, and must not, go into biographical details, for the ever watchful and busy journalist has anticipated me in this; but I may consider a few points, and give them, as far as I am able, their practical bearing.

A large majority of young men who engage in the study of medicine suffer more or less from pecuniary embarrassments, not to say pinching want. Some falter and faint on the wayside, and finally give up the loved pursuit in mute despair. Others press on—the feeling of necessity acting as a stimulus to their life-blood, which rushes on, overcoming all impediments to mental action and successful efforts.

The young man Blackman was among the latter. Wrapped in the mantle of adversity, he walked out beneath portentous clouds. There appeared here and there the faint glimmerings of a distant star, and while treading with firm step his rugged pathway, he saw that star come forth bright and beautiful—more bright and beautiful in contrast with its dark surroundings.

It is not unusual for young men, placed above need, to imagine that knowledge is a marketable commodity, to be bought and sold like the fleece from the lamb, and he who uses his wealth to facilitate his studies and obtain professional means of success is an exception to the rule. If Dr. Blackman, in his early manhood had possessed wealth, he might possibly have been enticed into the ways of the sluggard; he might not have been willing to go down amidst brambles and thorns in search of the healing balm; he might have been satisfied with plucking the fragrant rose leaning over his open pathway. Yet, my belief is, that an energy so indomitable, a determination so inflexible, a genius so tireless in action, could not have remained idle.

In comparing, however, his early with his more recent life, I am amazed with a seeming contradiction. We have seen that during the former period, he met here privation—there absolute want—with an undaunted spirit. During the latter, we have heard him groaning as if in the agony of despair, with bills by his side which he could not pay, and we have seen the big tears flow down his reddened cheeks, sufficient to have softened the most obdurate of creditors. In the one case, ambition knew no abatement in its elasticity, and no evil in prospect—in the other, fame had been reached, and the bold spirit had grown weak by the unremitting strain.

While Dr. Blackman was well versed in the strictly medical part of his profession, his knowledge of the literature of the surgery was without a breach. Why he chose to be the man of the knife, instead of the feeler of the pulse, is a problem. While in London, laying the foundation for usefulness and eminence, he was doubtless captivated by the masterly performances of the great surgeons of the day, and with whom he had the pleasure and advantage of being in close relation. And, doubtless, he was flattered by the attention which his young manhood received, and fixed a desire to imitate, if not excel, the grand achievements he had witnessed.

My near professional relations to Dr. Blackman, and the many opportunities for observation, have given me an individual opinion. He was naturally restless under restraint. He seized hold of a case with eagerness and a determined purpose, but that purpose must be executed within a given time. The rapidity with which he drew blood, exposed and removed morbid structures, might be called by some impetuosity; but the firm hand was always governed by knowledge, and the clear mind gave it a self sustaining power. The one operation done, he was ready for another, and another. He had the courage and accuracy of movement to accomplish the great things in surgery by the minute tick of the watch. He could sever the leg from the body at the hip joint in twenty-four seconds of time, but he could not bend over the couch of the sufferer, day by day, for long periods of time—patiently watch the progress and changes in symptoms—observe the action of remedies and deliberate on the best means of cure. If he had been a physician, merely, with an aim to accomplish great things speedily, we would never have been on friendly terms with him.

All surgeons have subjected themselves more or less to the imputation of a cruel nature—mainly because they penetrate the sensitive tissue and cause the blood to flow in threatening currents—and such have been the charges against Dr. Blackman. They are unjust. All his surgical performances were dictated by a duty and a desire to

benefit the afflicted. Outside of his profession his heart was not manly, not childish, but womanly in the full acceptance of the term, so far, at least, as acuteness of sensibility is concerned. The howling of the dog under torture, the prancing of the horse under the lash of the enraged teamster, filled him at once with feelings of deep, fierce resentment. Unnecessary cruelty to the lowest in the animal creation forced from him expressions of abhorrence.

It has been suggested that evenness of temper was incompatible with surgical distinction; that an operation is a miniature tempest, and that the guiding mind must be in correspondence with it. Many of the prominent surgeons of Europe have been named in illustration of this idea. That Dr. Blackman was equal to the best is generally conceded, but the head to think and the hand to execute were the elements of his matchless performances.

The contributions of Dr. Blackman to medical journals always bore testimony of medical scholarship, and valuable gleanings from the medical literature of the day were as easy to him as the skimming of cream from the milk by the practiced dairyman.

Dr. Blackman knew his power as a practical surgeon, but he did not appreciate fully his ability to instruct others. He imagined that he was a clinical, not a didactic lecturer. In this, however, he was mistaken, for no man was more competent to enlighten and captivate a class. Indeed, the practical and experienced man was excited to admiration by his enthusiastic manner and eloquent utterances. Ideas that may have been long hidden, came forth as if burnished with new life.

He has often received the common imputation among surgeons of jealousy of a rival—of an unwillingness to concede to them due merit. Possibly in his early efforts he may have desired a clear field, but after he had completed the range of surgical operations he became more indifferent to the achievements of others. Indeed, I have heard him speak in high praise of the skillful manner in which they had performed important operations. Why should it not be so? He knew and felt that he was above them all in dexterity and skill, and that his name stood high, if not the highest on the list. They did not deem themselves in any way disparaged by conceding to him superiority.

Superficially, Dr. Blackman bore evidence of great sternness of character, but in the social circle he threw around the most trivial circumstances an air of interest—sometimes of enchantment. And the friend who was being addressed was more pleased to listen than to speak.

There were but few men in whom he had unlimited confidence, and to those he adhered with strong tenacity. He may have confided too often in those who were prone to take advantage of his momentary impulses.

Whatever spirit of contention Dr. Blackman may have possessed, was to him, in moments of reflection, a source of extreme, unfeigned grief, and no man was ever more ready to proffer the hand of reconciliation. This was one of the prominent commendable traits in his social character.

Whatever he was is before the world. His good works have been seen, and his faults he was always free to confess. But I must stop.

We all admit that a great professional light has been extinguished, and now, while near the inanimate body, we are left only to reflect

upon the lesson which it inculcates. Grant that it may not be without profit.

THE PASTOR'S REMARKS.

At the conclusion of Dr. Wright's address, the Rev. Dr. McKnight said: "I have no doubt you desire to hear about Dr. Blackman's spiritual interests and religious prospects. Dr. Blackman's is not a case of death-bed repentance, but on the contrary his religious history and experience reaches as far back as my acquaintance with him. The doctor could hardly be regarded as a worldly man, in the ordinary acceptation of the term. He always was much attracted by the services of religion, and was brought up in the Sabbath-school, and has been actively and deeply interested in the subject of religion.

He then referred to the conversations that he had with him on that subject, and how satisfactory they were, and that he had repeatedly expressed his desire to unite with the church publicly; and he would have done so had it not been for his sickness at the time designated for so doing. He would have united with the church privately sooner than on last Monday but for the delusive hope of soon being well enough to make a public profession of faith. In referring to Dr. Blackman's conversion, he said: "Oh, how sweet the thought that this poor, struggling, tempest-tossed soul, has reached the sunny haven of celestial peace and happiness."

Dr. Blackman said many interesting things on his deathbed, but they are sacred and locked up in the hearts of the loved ones of his family. His friends, however, will be happy to know that, contrary to expectation, he died as peacefully as an infant falling asleep.

"So fades a summer cloud away;
So sinks the gale when storms are o'er;
So gently shuts the eye of day;
So dies a wave along the shore."

In conclusion, Dr. McKnight said that it became his duty to discharge himself of a commission placed in his hands by Dr. Blackman, which was to warn and entreat his friends and old medical students not to neglect their souls, and to beseech them to be reconciled to God. He earnestly desired to do so himself, but could not. "Tell them for me and from me, do not postpone becoming religious as long as I have done. Tell them, urge them to seek religion and embrace the gospel, and seek preparation for death, and tell them how happy I am since I've made my peace with my Maker."

The pall-bearers were Drs. Dawson, Dandridge, Thornton, Foster, Graham, Mussey, McIlvaine and Wise. The funeral cortege consisted of seventy-nine carriages, which followed the remains to Spring Grove Cemetery, where they were interred.

SPEAKING AND SINGING WITHOUT A TONGUE.—In the *Transactions of the Philosophical Society*, published between 1742 and 1741, there is an account of Margaret Cutter, who, when four years old, lost her entire tongue from a cancerous affection; but who, nevertheless, afterwards retained the power of taste, swallowing and speech, without any imperfection whatever. She not

only spoke as fluently, and with as much correctness, as other people, but also sung to admiration, articulating with distinctness all her words while singing. What is not less singular she could form no idea of the use of a tongue in other persons. This remarkable case was brought before the Royal Society, under certificates of attestation from the minister of the parish, a medical practitioner, and another respectable citizen, well known in Suffolk, where she resided. On account of the extraordinary character of the case, the Society requested an additional report upon the subject, and from another set of witnesses, named by the Society for the purpose, and for whom they drew up the necessary questions, and marked out the proper course of examination. The second report coincided with the first in all particulars, and shortly afterward, the young woman was brought to London, where she confirmed the account by personally appearing, and speaking and singing, in the presence of the members of the Royal Society, and many other persons.—*College Courant*.

REMOVAL OF THE TONGUE.—Mr. MacGillivray, surgeon to the Bendigo Hospital, reports, in the *Australian Medical Journal* for October, 1870, the successful removal of the whole tongue for epithelioma.

Editorial.

DEATH OF PROF. GEO. C. BLACKMAN.—It is a painful task, this month, to announce to our readers the decease of Prof. G. C. Blackman, M. D., Professor of Surgery for many years in the Medical College of Ohio. He died about ten o'clock Wednesday evening, July 19th.

For a number of months his health, which for years has been somewhat impaired, had been rapidly giving way before a complication of disorders that culminated at last in dropsy, which terminated his life.

In his death the country has sustained a great loss, and the profession of medicine and surgery has been deprived of one of its brightest lights. Not only will his departure be mourned here, but his loss will be felt in the old world, where his distinguished

abilities as a surgeon have been repeatedly recognized in the most honorable manner.

Dr. George Curtis Blackman was born in Newtown, Connecticut. He was the second child of Thomas Blackman, for years judge of the surrogate court. He early showed the greatest fondness for books, and exhibited in boyhood those habits of study and persistent labor toward the accomplishment of a single purpose which subsequently gained for him that distinction which comparatively few American surgeons have attained. He was successively at preparatory schools in his native town, Bridgeport, Conn., and Newbury, New York. From there he entered Yale college. He graduated in medicine in New York city. He was subsequently engaged in one of the city dispensaries, where he found

among the poor his earliest experience in the practice of his chosen profession. The details of his early history in the profession known to the physicians here appear to be meager, though it appears conceded that he practiced for a short time both in New York state and in his native state.

Though in delicate health and poor, the desire to thoroughly acquaint himself with the principles and practice of surgery was so intense, that he determined on visiting Europe. This visit not only revealed that wonderful attachment to his profession, but it was also the occasion which first revealed to the profession the genius which in his practice here has served him so well.

He started to London with but seventy-five dollars in his pocket. On reaching the great capital he sought out, from necessity, the cheapest quarters. There, during the cold season, with no fire, by the light of tallow candles, with his bed clothing gathered about his body to guard against the chill air of the most disagreeable season of England, he did his reading during the intervals between the lectures he was attending, living in the mean time on two penny rolls. At last, being from America, he made himself known to Professor Ferguson, who was not slow to discover in the young American no ordinary qualities. The distinguished English surgeon asked him where he was lodging at the close of the interview.

A short time after this he found in his humble quarters one day a note from Dr. Ferguson, inviting him to dine with him. Nothing could have surprised him more, and he was almost unprepared for this new honor. He borrowed suitable clothes in which to appear, and, after taking advice as to his behavior, thus presented himself at the house of his English friend. There he was still more surprised to be presented to men of such eminence in surgery as Liston and Cooper. "Here," said Ferguson, "is my young American friend, concerning whom I have spoken

to you." The young surgeon stood abashed in the presence of the learned men, but soon recovered himself, when the conversation turned upon his favorite topic.

The result of this interview was that Dr. Blackman was soon thereafter elected a member of the Royal Medico Chirurgical Society of London, an honor that at that time had been conferred on but four or five Americans. After his purposes were for the time accomplished in London, he returned to his own country, paying his way by acting as surgeon of the vessel on which he took passage. Subsequently he was at sea on account of failing health for a considerable time.

In 1855 there was a vacancy in the chair of surgery in the Medical College of Ohio, and, on the recommendation of Prof. Gross, of Philadelphia, Dr. Blackman was elected to fill the vacancy. This brought him to Cincinnati, and designated this place as the field in which he was to make his great professional conquests.

Here he at once entered upon a career of singular success. He eschewed general practice, and devoted himself almost exclusively to surgery. He aspired to perform capital operations, and startled the profession by undertaking the most dangerous cases.

His fame spread to adjoining states, patients came from distant places, and he early had a lucrative return for his labors.

From the time he first came to Cincinnati he held the chair of surgery in the Ohio Medical College without interruption. In this position he exhibited unusual traits of character, as he was indeed an unusual man. Perhaps few men have had more eccentricities. He was as bold as a lion with a knife in his hand and in the presence of a patient, and yet so sensitive to suffering that he would sometimes request them at home not to kill a chicken till he was away.

Sometimes he would exhibit before entering the lecture room a timidity which was almost inexplicable. He would insist that he was not ready, and could say nothing, and yet when urged to go be-

fore the class and at least speak for a few minutes, he would do so, and, suddenly becoming inspired with his theme, would electrify all with the splendor of his scientific resources.

He was a writer so ready that he could sit down and dash off article after article without even reading them afterwards, they were at once ready for the press; and his lectures were so nearly perfect they would answer for publication without revision. He had a memory of wonderful tenacity, and a courage in his profession which laughed at all obstacles.

For his profession his genius was a rich mine, upon which he could draw at will, and yet, aside from medicine and surgery, he was in many respects a child. He knew nothing about the management of his business affairs, and did not appear to care about them. With a splendid income, he cared little for accumulating fortune.

Eighteen times he crossed the sea, each time to add new treasures to his knowledge, but was indifferent to the expense.

He was eccentric in his intercourse with his associates, sometimes exhibiting an irascibility that provoked his best friends, but above his weakness his wonderful abilities in his particular field shone with a lustre which cured all defects.

In addition to his position in the Ohio Medical College, he has from his first appearance here held a position on the staff of the Commercial—now Cincinnati—Hospital, and has, for a number of years, been Surgeon-in-chief of the Good Samaritan Hospital.

He has written largely for publication, and performed an available service for his profession.—Dying at the age of fifty two, his light has gone out at the meridian of his life, when it would seem that he should only have reached the fullness of its usefulness.

He has been married three times. By his present wife he leaves three children—a daughter of fourteen and two sons aged respectively twelve and eight years. A daughter by the first marriage, who is

not now living, was the wife of Wm. M. Nichols, Esq. of this city. To family, city, country and his profession, Dr. Blackman leaves a vacancy which will not be filled.

HOSPITAL OF THE GOOD SAMARITAN.—Among all the private benevolent enterprises of which Cincinnati has so just a reason to be proud, there is none perhaps better known, and certainly none more worthy, than the "Hospital of the Good Samaritan" of the Sisters of Charity, situated on Sixth and Lock Streets.

The building was originally built by the Government for a marine hospital, but after having lain idle for a year or more, was, in the year 1863, purchased by Messrs. Butler and Worthington, and by them presented to the Sisters of Charity, with the single proviso that it should be open at all times to receive and care for the sick who were unable to care for themselves.

A short time since the managers of the institution held a meeting for the purpose of reorganizing the medical staff connected with it, and chose the following:

PRESIDENT.—Dr. W. W. Dawson.

SURGEONS.—Dr. W. W. Dawson and Thomas Wood.

MEDICINE.—Prof. Roberts Bartholow and Dr. Wm. Carson. The former of these has under his care the treatment of all diseases of the brain and nervous system; while the latter has as a specialty diseases of the chest.

OPHTHALMOLOGY AND AURAL SURGERY.—Profs. W. W. Seely and J. H. Buckner.

OBSTETRICS AND DISEASES OF WOMEN.—Profs. J. H. Tate, C. D. Palmer, and M. B. Wright.

DISEASES OF THE SKIN.—Dr. C. O. Wright.

MICROSCOPY AND PATHOLOGY.—Prof. James T. Whittaker.

Some modification of this reorganization will have to take place in consequence of the acceptance of Dr. Wood of an appointment upon the staff of the Cincinnati Hospital, which, we understand, will be followed by his resignation

of that upon the staff of the Good Samaritan.

As a whole the staff is an able one. There is a dead weight or so upon it, but we presume Sister Anthony will remedy this fault as soon as it becomes evident to her. We think she has done a sensible act in the appointment of Professor Tate. Prof. T. is an able lecturer, and one of the best clinical teachers in Cincinnati, and his services will undoubtedly be of great value to the hospital.

Dr. W. W. Dawson has been appointed to the Chair of Surgery in the Medical College of Ohio, *vice* Dr. Blackman, deceased. He also succeeds the latter as chief of staff of Good Samaritan Hospital. The Ohio College will begin its fifty-first annual session, October 3, 1871. The circulars will appear in a few days, and can be had from any member of the Faculty.

DEATH OF PROF. H. E. FOOTE, M. D.—Prof. Henry E. Foote, M. D., of the Miami Medical College, died June 12th, at the Cincinnati Hospital after a lingering illness. Prof. F. was connected with the Miami College from its commencement, and was much esteemed as an instructor. In the old organization he held the chair of chemistry, in the new the chair of anatomy. For a short time after his school succumbed to the Medical College of Ohio, he was professor of chemistry in that institution. For several years he was surgeon on the staff of the Cincinnati Hospital, and is said to have exhibited no little skill in the performance of a number of difficult surgical operations. For the last couple of years he acted as Assistant Physician to Longview Asylum.

Modest and unassuming, he numbered among his friends pretty much all of the profession of the city with whom he had acquaintance, which can be said of but very few physicians. At a meeting of the faculty of the Miami College, and at a meeting of the profession of the city, the usual tribute of respect was paid to the memory of the deceased.

MIGRATION OF WHITE CORPUSCLES.—The N. Y. *Medical Gazette* states that Dr. Caton, of Liverpool, who has repeated Cohnheim's experiments on the migration of the white corpuscles, affords an explanation of the seemingly contradictory results obtained by different observers. His first observations were made on winter frogs, which are always in a condition of debility, and in none, out of nearly a dozen of these, did he see anything more than is usually observed in inflammatory stasis; but on examining healthy and vigorous frogs freshly caught late in the spring, the passage of the white corpuscles through the walls of the smaller veins and capillaries was distinctly seen. He also attributes the failure of some of the former experiments to the administration of too large a dose of woorara.

MICROSCOPY.—We understand that Dr. Geo. E. Jones, who has given considerable attention to the subject, will this fall and winter give instruction in microscopy to such medical students and others who may desire to prosecute that most interesting and important study. By the way, we will mention that we have several small but efficient microscopes for sale; also a number of English objectives of the finest quality, that can not be surpassed in performance; and mounted objects, prepared by Wheeler, of London, in every branch of science. We will furnish catalogues of the same.

ADDRESSES WANTED.—Dr. J. W. Hadlock, 87 Broadway, Cincinnati, Assistant Secretary of the Ohio State Medical Society, desires the addresses of the following gentlemen, new members of the Society, for publication in the Proceedings, which are now in the printer's hands. Any one communicating the desired information will confer a favor. Dr. L. C. Herrick, Dr. H. Senseman, Dr. D. J. Snyder, Dr. John R. Woods, Dr. F. C. Larmore, Dr. A. Titus, Dr. R. McD. Gibson, Dr. E. G. McCulloch, Dr. J. W. Mendenhall, Dr. E. E. Day, Dr. W. R. Thompson.

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MENSTRUATION: ITS CONDITION IN PULMONARY TUBERCULOSIS.

By A. P. DUTCHER, M. D., of Cleveland, Ohio.

I.—THE NATURE OF MENSTRUATION.

MENSTRUATION is a term derived from a Latin word which means month; and in every woman, when healthily performed, it occurs monthly, and is an evidence of her ability to bear children. As a physiological process, it may be said to divide the life of woman into three periods. The first is—that of infancy and youth, and exists, in the generality of cases, from birth till the fourteenth or fifteenth year. The second comprises the most important period of her life—that in which she is capable of becoming a mother. This ceases at the fortieth or fiftieth year. This period is commonly called the change of life. The third is the remaining period of her life. But cases are constantly presenting themselves in which the menses make their appearance as early as the eleventh or twelfth year, and is sometimes delayed till the seventeenth or even the twenty-fourth year.

The following table is from Dr. Lee's work on the Diseases of Females, and is an exhibit of the time of the appearance of the menses as noticed in seventeen hundred and eighty-one women of England and France:

In 1781 women it occurred—

At 11 years, in.....	110	At 16 years, in	284
" 12 " "	144	" 18 " "	144
" 13 " "	356	" 19 " "	72
" 14 " "	366	" 20 " "	40

The succeeding table is from Dr. Edwards Smith's work on Consumption: its Early and Remediable Stages. It is designed

to show the age at which the menses made their first appearance in one thousand cases in England. The individuals were mostly phthisical patients under the care of Dr. Smith.

In 1000 women it occurred at—

Æt. Years.	Per Cent.	Æt. Years.	Per Cent.
7.....	.26	16.....	15.1
10.....	.53	17.....	8.0
11.....	4.4	18.....	6.0
12.....	6.2	19.....	3.9
13.....	11.4	20.....	1.4
14.....	18.2	21.....	.26
15.....	18.2	24.....	.26

From the above tables it appears that from fourteen to fifteen years was the most frequent period of the occurrence of the menses, and that there is a progressive increase from eleven years, and a decrease until twenty years.

These observations coincide with some tables that have been made in this country on a less extensive scale; and although cases have been reported of discharges very much resembling menstruation occurring in childhood, there is no proof that such discharges are identical with it. They depend, for the most part, upon ordinary congestion of the uterus, in the same manner, and for similar causes, that may produce congestion in the lungs, and consequent hemorrhage in children and adults. A mother came to my office with her little daughter, aged eight years, very much alarmed, stating that she believed her child was menstruating; she had been in the same condition four weeks before. A careful examination of the case proved the existence of hæmaturia.

Various causes may contribute to the early or late appearance of the menses, such as climate, constitutional temperament and habits of life.

Thus, writers tell us that, in the south of India and other hot countries, girls begin to menstruate at eight, nine and ten years of age; but, advancing to the northern climates, there is a gradual protraction of the time, till we arrive at the extreme north, where women do not menstruate till they arrive at mature age, and then in small quantities at longer intervals, and sometimes only in summer. And it is also said that when they do not menstruate according to the genius of the country, they suffer equal inconvenience as in warm climates, where the quantity discharged is much greater, and the periods shorter.

I have for several years observed that the menses appear much earlier in females of the nervo-sanguineous temperament than those of the other temperaments. Persons thus constituted have an exuberance of the vital forces; hence all the physiological changes are accomplished more speedily; indeed, all here is life and activity; there is no dullness either of body or mind; all things are in the spring time to it, and the young miss is sometimes the mother at *fifteen*. An instance of this kind recently came under my notice. The individual was only a few days over fifteen years. She had an easy labor, the child was of average size, and the patient had a good getting up. Her mother informed me that she changed regularly at the age of twelve. For her age she was a person of precocious intellect, and very beautiful: a perfect Venus.

Certain habits of life also accelerate the appearance of the menses, and among them may be enumerated the premature cultivation of the passions by the perusal of obscene romances, the inspection of lascivious pictures, the theater, the ball-room; the bad example of premature libertinism, of which too many examples are unfortunately furnished in great cities. These specimens of premature puberty, the miserable consequences of too great vivacity of the passions, are sometimes met with as early as the tenth year.

"In this city," says a distinguished physician of New York, "I have known several instances of menstruation at the tenth and eleventh year, and in all the instances that have passed under my observation, the children were born of parents who had exhausted the powers of life by too severely taxing the nervous system in the pursuit of pleasure. One instance, in particular, was that of a scrofulous child with a curvature of the spine. In this case, a tender but unwise mother, contrary to our often-urged entreaties, persisted in feeding the child with highly spiced food, tea and coffee, bathing in excessively warm water, and putting it to rest upon a bed of down. The consequence was the appearance of the menses at the eleventh year, and death at the sixteenth. Tonics, sea air, and everything that wealth could offer, availed nothing, and the poor girl died from pulmonary tuberculosis."*

In regard to the amount discharged at each menstrual period

* "Woman and her Diseases," by E. H. Dixon, M. D.

we have no means of positively determining. Some writers have estimated it at five ounces, others at eight and ten; but it is not a matter of any great practical importance to assign any special amount for each monthly period; because that must depend upon natural causes. For the same reason that they are sometimes established even in those who are perfectly healthy much earlier or later than in others equally so, it is often greater or less in amount. Every physician of extensive experience must have occasionally met with cases in which it is the constant habit of the individual to have but four or six catamenial discharges during the year, and yet enjoy very good health. Careful investigation will, no doubt, show that these functions will differ as much as some others, such as the required amount of sleep, food, clothing and exercise. What is demanded by nature is that the woman should menstruate according to the requirements of her own peculiar system; and this would unquestionably be far more uniform in times of appearance, quantity and effect upon the constitution were it possible for females to come up to the period of puberty without the innumerable obstacles presented by our imperfect and miserable social system.

The requirements of fashionable frivolity and the damning vices of our present social system expose the younger female portion to a world of misery. That this opinion is not a mere whim of the writer, I refer the reader to the following remarks of M. Calumbat: "The mode of life to which the social condition condemns women, especially in large cities, delivers them over, so to speak, defenceless, against the numerous causes of chronic disorders of the uterus, etc. Thus in populous cities, idleness, effeminacy, or sedentary life, the constant contact of the two sexes, and the frequenting of places where everything inspires pleasure; prolonged watching, excessive dancing, frivolous occupations, and the study of the arts that give too great activity to the imagination; erotic reading; the pernicious establishment of an artificial puberty; the premature shock of the genital system; the concentration of the sentiments and thoughts on objects which keep the genital system in a state of permanent excitation: finally, a number of vicious habits and excesses of all kinds, which, by introducing mortifications, more or less profound, into the general constitution, react more particularly upon the sensibility of the womb, which, in the female,

is the only organ most apt to lend itself to fluxionary movements, but likewise the centre towards which all morbid actions seem principally to tend."

We have not space to prolong our remarks under this head much further. Sufficient has already been said to impress the reader with its importance. We would, therefore, simply add that when menstruation occurs at the proper age, and is well performed, the individual may be regarded as the most fortunate; "for a premature eruption of the menses is always to be deprecated, because it is the evidence of a precipitate development of certain parts of structures, while others, not less important in the same category, are delayed and incomplete. The individual who passes at a usual and healthy rate through all stages of growth and development, from infancy up to maturity, is most likely to enjoy a healthy and happy life, free from weakness, pain, and the danger of premature death. Death loves a shining mark, it is said, and those children, whose youth astonish us by the early perfection of their structures or their intellectual faculties, are snatched soonest from the world, as the earliest blossoms are ever most exposed to the chilling frosts of spring." *

II. THE CONDITION OF THE MENSES IN PHTHISIS.

In pulmonary tuberculosis the menses are almost always suppressed; and the reason for this is obvious. Phthisis being a constitutional disorder, wherein the life-forces are enfeebled by a failure in some of the blood-making organs, the uterine functions cease for the want of proper nutriment and not from local disease. Hence, we frequently see young women lose their menses without any visible cause, when all at once symptoms of phthisis will present themselves, and the case proceeds to a hasty and fatal termination. But in some cases they are not suppressed at the commencement of the disease; they may be irregular, scanty, occurring every ten, fourteen, twenty-one, twenty-eight or forty days, just as the case may be. But, as the disorder advances to the latter stage, they are always suppressed. In several hundred cases I can not now remember but two where the menses continued until the last. These were exceptional cases, and were patients over forty years of age. And my experi-

* Meig's "Woman and her Diseases," page 396.

ence leads me to the conclusion that the menses are more generally suppressed at the commencement of this disease, in very young women, than in those who are more advanced in life. M. Louis found that where the duration of phthisis was less than one year, the average period of the menstrual suppression was about the middle of its progress. When the tuberculous affection was prolonged for more than one or two years, the suppression occurred during the latter period. Thus in a young woman, in whom the disease lasted three years, the menses ceased at the end of the thirteenth month; while another patient of the same age, and in whom the disease was similar, continued to menstruate until within two months of the fatal period.

The sudden suppression of the menses in an individual who has a hereditary proclivity to pulmonary tuberculosis should be looked upon as a very suspicious circumstance, particularly, if she be unmarried. A young woman ceases to have her regular menstrual discharge, she becomes pale and feeble; she has pain in her head, loins and limbs—after a time she emaciates; her friends become alarmed and call in a physician. He gives her case a very superficial examination, and refers all her difficulties to a suppression of the menses. Remedies are prescribed with a view of restoring them, but, alas! they are without effect, and the medical attendant is suddenly aroused to the sad conviction that he has made a mistake in his diagnosis—phthisis, with all its formidable features, is staring him in the face.

It was for a long time the opinion of writers on pulmonary tuberculosis, and even Dr. Lawson, in his work on the subject, does not discard the idea, that the disorders arising from the menstrual suppression might lead to the deposit of tubercular matter in the lungs. We do not consider the suppression of the menses in any way a cause of phthisis pulmonalis. In this case they cease from a failure of the vital forces, as already remarked, and it is a marked symptom of the great constitutional malady, which will ultimately end in the dissolution of the whole bodily fabric, unless it is speedily remedied. A limited number of tubercles in a lung may be easily remedied, and the patient regain her wonted health. But a constant repetition of the morbid process is greatly to be dreaded, and can only be averted by correcting the constitutional diathesis.

If, therefore, the physician suffers himself to be led away by

the local symptoms, and treat them alone, he will not have much success in curing this disease. If, when the menses are suppressed, he employ active emmenagogues alone, it may lead to very injurious results. I have long since come to the conclusion that, when pulmonary tuberculosis exists, all active measures to restore the menses are wrong. Indeed, they stand in the way of other agents that will overcome the constitutional malady, which is the chief difficulty.

That such cases are sometimes restored to health, I am well satisfied from my own experience. Here is one among a number, which I extract from my book of Medical Fragments:

August 5, 1859. Called this day to see Miss —, aged nineteen; has not been feeling well for three months; has a slight cough on rising in the morning, with mucous expectoration; pulse, 96; respiration, 25; has fever in the latter part of the day; spirits hopeful; appetite not good; menses suppressed for four periods; bowels costive; very restless at night, with pain in the small of the back and limbs. Thompson's gingival margin presents on the gums of the lower jaw; urine scanty and high colored; had slight hæmoptysis four weeks since; has no hereditary title to phthisis. Menses made their appearance at fifteen, and had been regular up to the time of their suppression, and knows no cause for their sudden disappearance. Her habits are retiring, and for several months has taken but little exercise. Has never suffered from any severe illness.

The physical signs are marked; inequality in the expansion movements of the two sides of the chest; dullness on percussion at the right inferior clavicular region, and, on auscultation in the same region, prolonged expiratory murmur of a high pitch is very audible. On the left side the sounds are normal, with a little increased resonance, and slight sonorous rhonchi.

The case was set down as one of limited tubercular deposits in the superior lobe of the right lung; and the patient was placed upon the use of (iron), quinine, cod-liver oil, and the compound syrup of phellandri aquatici, with a nutritious diet.

October 1st. Patient very much improved; had a slight menstrual discharge three days since; treatment continued.

November 1st. Patient still improving; is able to ride several miles a day on horseback; has gained in weight fifteen pounds. From this time her menses became regular, and her general

health good. When last this patient's chest was examined, nearly three years afterwards, there was dullness on percussion, just under the clavicle, and on auscultation there was bronchial breathing over a good portion of the superior lobe of the right lung, showing very clearly that the disease had been arrested by the correction of the constitutional vice, and the transformation of the tubercular deposits into cretaceous matter.

The regular recurrence of the menses in phthisis, after they have been suppressed for some time, is a good omen. I have notes of several cases where its appearance was almost the first symptom of amendment. I have the history of two cases in particular, where the patients recovered under the most hopeless circumstances, and that, too, by no extraordinary medication. The common trouble with phthisical patients, is, they do not employ, as faithfully as they should, the remedies which experience has demonstrated highly useful in obviating their disease. They seek for a specific, and thus waste precious time, and ultimately sink under their disorder. And physicians are sometimes to blame for this. Many of them have a fashion of speaking so disparagingly, even of our best therapeutics for tuberculosis, that it is no wonder the patient loses confidence in his physician and seeks relief from quackdom.

But to our cases. The first patient was a young woman, aged eighteen, the only daughter of a widow. I found her in the cottage of loneliness and poverty; she had toiled hard to support herself and mother; had endured numerous privations, and lived on scanty fare. At the time of my visit she had been ill for six months. Her general symptoms all pointed out phthisis pulmonalis in an advanced stage, her eye had an unearthly brightness, and her cheek the brilliant flush of hectic. She was emaciated and very weak—could not sit up more than an hour in the course of the day. Her appetite was good; bowels regular; menses suppressed from the beginning of illness. The physical signs pointed out the existence of a considerable cavity in the superior lobe of the left lung. The right lung was free from disease.

From the general symptoms and physical signs we regarded the case as well nigh hopeless. There were three things, however, that inspired us to make an effort to save her from a premature grave; the absence of Thompson's gingival margin, the

limited extent of the local lesion, and the integrity of the stomach and bowels. So far as I could discover, there was but a single suppurating cavity, without any signs of tubercular deposits in other portions of the lungs. Cases of this kind stand a better chance of recovering than those where the deposits are smaller, but more universally distributed through the pulmonary tissues. And I have occasionally met with cases where a cavity of considerable magnitude appeared to act as a preventive to the further extension of the local disease, and the life of the patient greatly prolonged—much longer than where they were more numerous and destroying a much larger amount of pulmonary tissue.

The patient was treated to iron, quinine, cod-liver oil, and a generous diet, just as circumstances indicated, for three months, with occasional inhalations of iodine. Her menses appeared slightly at the fourth week; more abundant at the eighth; and at three months were nearly normal in quality and quantity. From the eighth week her improvement was very marked. The expression of her countenance became more natural; her pulse and respiration less frequent; cough not so troublesome, and expectoration very moderate in amount. The cavity was about nine months in healing. This case occurred about thirteen years since—the patient has enjoyed a fair amount of health ever since, has been married six years, and is now the mother of two children. The only marks which the disease left are a slight frequency of breathing and flattening of the superior part of the left breast, just under the clavicle.

The second case was that of Mrs. R. I was called to see her on the 10th of October, 1868. Her age was 24; of the nervo-sanguineous temperament; no hereditary title to phthisis—father and mother living and healthy; has been married five years; has two children, the youngest is thirteen months. Her illness commenced at the birth of her last child. When it was six days old she took a violent cold; had chills and fever alternately for a week, with pain in her left breast, cough and expectoration; she was now quite ill for three weeks; Dr. said she had lung fever. After this she made some improvement, but never regained her former health. Pain still continued in the breast, and her cough at times was troublesome. About the first of June she commenced to have what her physician called chill

fever. He treated her for it, without relief, until the middle of July, when another doctor was called in, a homeopath, who managed her case until I was invited to take charge of it; her disease still being called chill fever.

At the time of my visit her chills and fever were very erratic; sometimes they occurred every day; then again every other day or third day. Sometimes they came on in the morning, at others in the afternoon. They were not attended by pain either in the head, back or limbs. At night there was commonly profuse perspiration. Her menses have been suppressed from the beginning; had milk for her child only six weeks; appetite good; spirits hopeful; pulse, in the sitting posture, 102; respiration, 28; temperature, 104, in the afternoon; cough annoying, especially during the chills and fever; expectoration scanty, under the microscope it is found to contain ordinary pus cells, and withered tubercular cells; the urine is scanty, high colored, acid, specific gravity, 1020, and under the microscope exhibits a large number of octohedral crystals of oxalate of lime; Thompson's gingival margin is slightly defined upon the gums of the lower jaw; the mucous membrane of the throat is injected, and the tongue is clear, but a little redder than natural. Notwithstanding the length of her illness, and the severity of her symptoms, she is not very much emaciated, neither is her loss of strength very great; for she can set up most of the time during the day, when not suffering with the chills and fever.

A physical exploration of the chest revealed the following: Inequality in the expansion movements of the two sides, the left being somewhat restricted. Percussion over the same side yields marked dullness down to the third intercostal space; on the right side percussion is normal. Over the region of dullness auscultation elicits *humid crackling*; in the bronchial region, on both sides, there is considerable mucous rhonchi; the respiratory murmurs on the right side are nearly normal, being, if anything, slightly intensified. The heart sounds are normal.

The diagnosis appeared to be obvious—tubercular softening in the superior lobe of the left lung.

Treatment prescribed was:

R Elix. calisary.
Syrup hypophosphite calcis, aa. f ʒiv.
Syrup sanguinaria comp., f ʒil.
Solution strychnia, U. S. D. f ʒij.

M.

Sig. A tablespoonful three times a day after meals.

To relieve pain in the side affected, the compound tar plaster was ordered as a counter-irritant. To mitigate night perspiration, on retiring a spongy bath composed of a drachm of acidum sulphuricum aromaticum, in a pint of water, was employed, and internally, a teaspoonful of quinine sulph., and as her appetite and digestion were good she was allowed a substantial diet.

After four weeks persistent treatment, with the above therapeutics, there was a marked mitigation in all the pressing symptoms. The physical signs and an examination of the sputum by the microscope clearly demonstrated that the softening of the tubercular matter was complete and a cavity formed. From this time she continued to improve daily in weight and strength. Her menses appeared on the first of December, and afterwards continued regular. The cough and expectoration gradually became less, and by the first of May the cavity was perfectly healed. The patient has since had a child, and at the present writing is in the enjoyment of good health.

She had no chills and fever after the third week. After the fourth week the syrup sanguinal comp. was omitted; cod-liver oil and iron was prescribed with the other remedies. The quinia was also continued at night; given in this manner and quantity it is a splendid sedative, it will often secure the patient a refreshing night's sleep, when opium or morphine fails.

In concluding our remarks on this subject we should not neglect to say that there are some practitioners who are in the habit of considering the lungs perfectly safe so long as a woman menstruates regularly. They regard phtisis pulmonalis and menstruation incompatible; but this is an error, for some women will menstruate and give birth to robust children until the very last. And it is sometimes astonishing with what perfection the womb will perform its appropriate functions, even when the lungs are so impeded in their action by tubercular disease, that they can hardly supply the system with oxygen sufficient to support animal life. Yet the foetus will thrive in utero, and, to use the language of Dr. C. Meigs, "issuing in o the world redolent of life, and escaping, as it were, from the sepulchral cavity of its dying mother's womb."

SOME CLINICAL CASES WITH REMARKS UPON THEM.

By W. W. SEELY, A. M., M. D., of Cincinnati, Prof. of Ophthalmology and Otology in Medical College of Ohio.

I present you, to-day, gentlemen, first, some cases of staphyloma of the cornea. You see the appearance of the eye—in one case there is a slight bulging in the upper part of the cornea; in another, a dark lump upon the cornea; in another, an enormous tumor presenting between the lids, which they are unable to conceal. In the first two we have what is called *partial staphyloma* of the cornea and iris; in the latter, *total* staphyloma of these two membranes. To obtain a clear idea of what a staphyloma is, let us see how it is produced.

You are aware that some forms of inflammation of the cornea have little or no tendency to produce an absolute destruction of this membrane, in part or in whole, at most, only leave it blurred or opaque, by altering the cell walls or their relation; that some other forms have as a characteristic mark the tendency to produce a greater or less destruction of this membrane. As a familiar example of the former we might mention the so-called diffuse keratitis; of the latter the two forms of suppurative keratitis, acute and chronic; as likewise the two forms of ulcerative keratitis, acute and chronic. Any alteration in the normal arrangement of the anatomical elements of the cornea interferes with its transparency, and the greater this alteration, the greater will be this interference, so you are continually meeting with corneal disturbances all the way from slight specs to a general haziness; from a distinct white spot to a total transformation of the entire membrane into an opaque mass.

The formation of opacities is of course *one* of the dangers in all corneal affections, but a perforation of its tissue is the *chief*, this danger bearing always a relation to size and position. A small ulcer may perforate and heal, and leave no trace except the small white spot, which, if not over the pupil, causes no harm. A larger perforation may allow the iris to fall into it, and then, by the accumulation of the aqueous humor behind, be protruded more and more, and you have what is termed staphyloma iridis, staphyloma of the iris. I have already shown you examples of this where the protrusion was chiefly iridal tissue, in reality what is known as prolapsus of the iris.

If the ulcer is pretty large we have the aqueous humor escaping, the iris falling against the cornea, either blocking up the opening, and a sufficiently thick layer of lymph is formed to resist the intra-ocular tension, or it protrudes more or less, the lymph layer that soon forms over its surface not being firm enough to withstand the intra-ocular pressure, and it yields more and more, so that what at first was but a small bulging becomes transformed into a still greater, and involves more or less of the cornea.

Then by staphyloma of the cornea and iris we mean, a greater or less destruction of the corneal tissue, a falling in of the iris into the breach, and then a yielding of the parts at this point to the intra-ocular pressure. As I have said, the yielding may be very great even when there was originally but a small ulcer, from a gradual involvement of the surrounding healthy parts.

And we have so-called partial staphylomata and the so-called total staphylomata, the former when there is but a small portion of the cornea destroyed; the latter when there has been an almost total destruction of the cornea and then a bulging of the entire mass. The case we are particularly interested in is one of total staphyloma, the base you see corresponds with the sclero-corneal circumference. We have had an enormous destruction of corneal substance, a prolapse of the iris, that prolapse covered with a layer of lymph, but too weak to support the intra-ocular pressure, and it has gradually yielded till it has become what you now see it, a large tumor protruding between the lids. Of course in these large perforations of the cornea the lens may have escaped or it may not, but the fact is one of far greater importance than is usually insisted on. And I would especially call your attention to the fact *that in such cases, when the lens has been left in the eye, a staphyloma almost necessarily forms. So then when you find this destruction of the eye for all visual purposes, and there is at the same time a tendency to form a staphyloma, remove the lens.*

You will in many cases relieve an ordinary staphyloma by making a puncture and giving escape to the lens. I have already done this in one of our cases. In the one I propose to operate upon to-day there is such a large extent of cicatricial tissue I think best to remove a portion of it.

For such a case the operation devised by Mr. Critchett would

answer very well, *i. e.* the passing of four or five curved needles armed with threads through the base of the tumor, then abscising the tumor in front of them, after which the needles are to be drawn through, the edges of the wound brought together by tying the threads. Still, I prefer the ordinary method of abscission. Taking a broad cataract knife, transfixing the tumor at its base, the selero-corneal junction, cutting it out, making an upward flap, then seizing this flap with the forceps, and snipping it off either with the scissors or the knife, and immediately bandaging the eye firmly so as to prevent any hæmorrhages into the bottom of the eye, and facilitate union. This method I think leaves the best stump for an artificial eye. Critchett's operation, unless made with very great care, is liable to leave an *oval* stump with long diameter horizontal, and hence the lateral movements of an artificial eye would be restricted.

The next case I present you is one of the so-called leucoma adherens. There has been a large ulcer of the cornea, and the opacity left covers the larger part of this tunic, and the pupil, as you see, is involved in the cicatrix. Some of the inner portion of the cornea is still transparent, and I have succeeded in giving the patient some sight by an iridectomy, and present him to explain the process in such cases. If only a small portion of the cornea remains transparent, and an attempt is made in the usual way to practice an iridectomy for an artificial pupil, one will be apt to fail, so far as procuring much sight goes, *because the incision made opposite the transparent part produces a haziness of this, therefore to avoid such an accident I made my incision below, and tore the iris out with the forceps.* In this way the transparency of the cornea is not interfered with, and you can give the patient the entire benefit of the opening made by the removal of the iris.

The next case is one of obstinate chronic iritis. When we throw the light upon the pupils by the oblique illumination you see the pupillary field is whitish, due to lymph on the anterior surface of the lens capsule. The pupillary margin is almost completely bound to the anterior capsule. And no medicine, internally or locally, has succeeded in tearing these synechiæ loose, nor even in preventing relapses of inflammation.

Of course the object of all treatment is to bring the parts as nearly into a normal condition as possible, and by every degree

that we fall short, by so much do we fail to give the part its physiological function. The normal action of the pupil being perfect freedom to dilate and contract under the varying degrees of light or accommodation, anything that interferes with this action is so much damage. The great danger, "the mode of death," if you please, in iritis, is the binding of the pupillary margin of the iris to the anterior capsule of the lens. Any adhesion, any synechia posterior, will keep up an irritation is a damnum permanens. Probably a small synechia posterior next to a total one is of the most consequence.

Here greater freedom is allowed the pupil, and consequently greater irritation. In total synechia, especially in the form where the pupillary space is occluded, that is, filled with lymph, we have the communication between the anterior and posterior chambers cut off. When, as in this case, you see so much lymph, and the texture of iris looks indistinct, you must be on your guard and not expect too much from an operation, either so far as regards its therapeutical or optical effect.

You will find when you come to make your iridectomy that the iridal tissue is atrophied, and portions included in the forceps will slide over the layer of lymph behind, a similar condition of things to that I explained to you as being met with in sympathetic iritis. However, in these cases of chronic iritis with synechia posterior the remedy lies in the iridectomy.

As to the position of this iridectomy we have our choice of the entire corneal circumference.

You are aware what the best point is when you can select, *inwards, or downwards and inwards.*

Of course directly outwards is the easiest, but the worst for visual purposes.

Too much care can't be exercised in every case when an artificial pupil is to be made. The position upon the eye, physiologically considered, then with regard to the transparency when that is interfered with, so in such cases an oblique illumination is absolutely indispensable. Again, with regard to the size into which two or three factors enter according as the patient has one eye or two, and second, according to his occupation.

It is pretty severe to find a laboring man with an enormous artificial pupil, either outwards or downwards, always dazzled by the light.

A large pupil for one whose work was fine would be a disadvantage. So here as in all operations that relate to the light, bear in mind that you have to do with *quality* as well as *quantity*, that in some cases quantitative vision is of predominant importance, while in others qualitative. Of course the nearer the two are perfectly combined the nearer we arrive at the physiological state.

RESEARCHES UPON THE LOSS OF SMELL.

By DR. NOTTA.

(Translated from the "ARCHIVES GENERALES." By Thomas C. Minor, M. D.)

Of the five senses, the least essential in man are evidently those of smell and taste, and precisely by reason of their least importance, the different alterations that they may present, pass most often unperceived by physicians, and even at times by the patients themselves.

When, by chance we are consulted upon the loss or weakening of one of these senses, we find ourselves truly embarrassed, for if we seek to interrogate the treatises on medicine, or if we ransack the divers periodical collections, we are surprised to see that the *Traité des odeurs d'Hippolyte Cloquet*, (Paris, 1821,) the *Thesis of Pressat* upon a case of absence of the olfactory nerve. (1837,) and the article, *Olfaction*, of P. Berard, of the Dictionary. in thirty volumes, sums up very nearly all we know on this subject. Doubtless, it is not the question here of those serious affections which may, at any given moment, menace the days of the patient; but, in order not to compromise the general health, the loss of smell and of taste merit not less to be studied, and you will understand it so much the better when, in the course of this memoir, I shall report cases of which I have been a witness, in which practitioners of merit, surprised, as it were, by functional troubles, which to them being unknown, have committed errors which would have, up to a certain point, been prejudicial to the patient.

Having met with a certain number of cases of anosmie, I have gathered them together, and propose here to make a comparison between them. I have not the pretention to give a complete description of this disease, but hope, by some interesting obser-

vations, to throw a certain light upon this subject. I should not be able to speak of the loss of smell without mentioning its consequences upon the taste. These two senses are connected in such a manner to each other that it is difficult to occupy ourselves with the first and to neglect entirely the second. Nevertheless, it is only for the purpose of showing the influence of smell upon taste that I shall occupy myself with this latter sense.

Anosmie is produced by the most different causes. Among others it may be congenital, and cases of this sort are not rare; three times I have had occasion to prove at the autopsy the cause of this imperfection, and three times it was shown that there had been absence of the olfactory nerve, (observations of Rosen, Muller, Cerutti and Pressat.) It is to this cause that it is necessary to attribute the majority of cases of anosmie which date from infancy. I have now several examples in my mind's eye.

Observation I.—*Congenital Anosmie*.—M. N——, aged forty years, has never perceived any odor, good or bad. The taste is imperfect. He has only the sensation of sugar, salt, of bitterness and acidity, but he perceives no savor. The nostrils are well formed. The air penetrates them freely. The health is good.

Observation II.—*Congenital Anosmie*.—Victoine ——, washer-woman at the hotel in Liseaux, aged forty years, has never perceived any odor, the same state existed in her earliest childhood. Taste imperfect; she has the sensation of sugar, of salt, of bitterness and acidity; but she perceives no savor; numerous experiments permitted me to verify her assertions; the nostrils are well formed, the air circulates in them easily.

Observation III. *Congenital Anosmie*.—Mme. P——, aged thirty-four years, of habitual good health, has never perceived any odor from her earliest infancy. She had heard her parents say that at the age of one year she had a very serious disease, and that the physician said that the brain was attacked. The nose is well formed, the nostrils only are a little contracted. Taste is imperfect, she has never had the perception of savor and odor; she has only the sensation of sugar, of salt, of bitterness and acidity. Anosmie may be the result of the destruction or of the compression of the olfactory nerves, by a tumor which

takes its origin either in the cerebral substance, or in the membranes of the brain, or finally at the base of the skull. An abscess of the pituitary gland, caries or an alteration of the cribiform plate of the ethmoid may likewise produce the same effect; and we find disseminated in the periodical collections observations which would be too long to report here, but which would establish in an incontestable manner these different causes of anosmie. This infirmity may be regarded, therefore, a very secondary phenomenon of a grave affection, often mortal, of which the symptoms are more or less well characterized. It may however have its importance in giving to the diagnosis greater precision, and permitting it to determine, in an almost mathematical manner, the seat of the lesion.

But the olfactory nerve is not always destroyed by an extraneous cause; it may become itself, as among the old, the seat of a more or less complete atrophy, which corresponds with the loss or diminution of the sense of smell. M. L. Prevost has published in the *Gazette Medicale* a very interesting note upon this subject, and, in numerous observations gathered with care, he has made known to us the alterations that the olfactory nerve undergoes with the progress of age. I borrow from his memoir the descriptions of these lesions: "Among adults, and in the case where the sense of smell is intact, the olfactory nerves are remarkable by reason of their volume; the peduncle is white, pearlish, and terminates by a rosette bulb, voluminous, filling the groove of the ethmoid.

"In old age, on the contrary, and above all in the cases where the sense of smell is obtuse, the olfactory nerves become slender, semi-transparent, grayish. The olfactory bulb diminishes in volume and no longer fills the groove of the ethmoid. Microscopical examination shows us among adults, in the peduncle, a great richness of nervous tubes (*in filaments*); we here find it is true amyloid corpuscles, but in small number and disseminated. When the nerves are semi-transparent nervous fibres are rare, and missing at the same time completely at certain points. There is, in addition, a very great accumulation of amyloid bodies, collected *en groupe*, pressed one against the other and abundant, above all in the parts where the nervous fibres are deficient, and this alteration coincides with the age of the subjects, and above all with the diminution more or less great of the sense of smell."

It is to this kind of lesion that I believe myself to be able to attribute the loss of smell in the observations which follow :

Observation IV.—*Anosmie from atrophy of the olfactory nerves.*—Mme. Lady Superior of the hospital in Liseaux, aged seventy-six years, of an excellent constitution, is not subject to headaches nor nervousness. She has completely lost her smell since twenty years ago. Ten years before, that is to say thirty years since, without any appreciable cause, without having had coryza, she remarked that from time to time her sense of smell altered little by little, and finished by being lost altogether. She then took a purgative, and the sense of smell returned for many months up to the time it became altered anew. Things remained in this state during half a score of years, when the sense of smell was lost completely, as well as its congener taste. To-day, January, 1870, there is complete abolition of these two senses. Savors are not perceived, the sensation of salt, of sugar, of bitterness and acidity alone remain.

Observation V.—*Anosmie from atrophy of olfactory nerves.*—Lafille, aged fifty years; has always been in good health, with the exception that for two years past she has had very intense neuralgic pains in the head. At the time of the most pain she has had no discharge from the nostrils, and did not notice that odor was abolished. Eight months she perceived that from day to day the sense of smell became more feeble, and for the six months past it has been completely lost. At the time she dosed herself with medicine hoping to be cured. Tobacco, which she could not smell, she snuffed, but it did not restore the lost sense. Taste is lost, she has not the sensation of savors.

Before attributing, in this case, the loss of smell to an atrophy of the olfactory nerves, I shall make certain reserves. The anosmie manifested itself after very intense neuralgic pains, existing for the past two years. Now, can not one ask if we have not here a paralysis of the nervous ramifications of the olfactory nerve consecutive to a neuralgia of the fifth pair, paralyzes, which are far from being rare in the other senses, and which I have described in this article? However, as up to this day the like fact has not been observed as to odor, and, as the autopsy fails to show it, we shall confine ourselves to pointing out the possibility of the thing, and we will rank, until such a time as more amply informed, this observation among the cases of atrophy of the olfactory nerves.

Observation VI.—*Anosmie from atrophy of the olfactory nerves.*—

B——, woman, aged seventy-three years, of habitual good health, lost, at the age of fifty-nine years, her son, and experienced most violent grief at that time. A short time after, without any appreciable cause, without having had any attack of coryza, she perceived that her sense of smell was becoming feeble. She also remarked that she no longer felt certain odors, such as that of roses or mignonette; this weakening of the olfactory sense increased little by little, and finally terminated at the end of some months by no longer being felt at all. At the same time she lost the sense of taste entirely. She asserted that she no longer perceived the taste of salt and of sugar. She remained, she said, in this state twenty-six years. Since eighteen months or two years, without knowing to what cause to attribute it, she has noticed certain odors, above all when the weather is very dry, for example, the odor of coffee, the odor of gas works, but the perfume of the mignonette or of roses she has not perceived. At the same time her sense of taste returned a little. She recognizes the taste of burning, of salt, of sugar. The savor of coffee is very undecided; other savors are not perceptible. The air circulates well in her nostrils.

It seems to me impossible to explain the loss of smell otherwise than by the atrophy of the olfactory nerves. However, this function, which slept during twenty-six years, in order to reappear afterwards in a very incomplete fashion, it is true, is a strange phenomenon, but we can not doubt it, the affirmations of the patient being very precise; for the remainder we shall meet with other observations, in which, in the meanwhile, the return of the function took place after a much less lapse of time.

In the following observations it seems to me difficult to attribute the loss of smell to an atrophy of the olfactory nerves, and I shall propose, until more fully informed, to call *essential* this form of anosmie, not being able to connect it with any material lesion.

Observation VII.—*Essential Anosmie.*—Mme. M——, aged about twenty-six years, of a very good constitution and excellent health, always very regular, is subject to passing headaches, but never has had neuralgia of the fifth pair in any way intense, neither frequent coryzas of long duration, no cerebral affection of any kind, if we except the fact that she was once in love.

Ten years since she noticed for the first time that, without any appreciable cause, she had lost the faculty of perceiving any odor for some weeks back, then the sense of smell regained its integrity in order to disappear some time afterwards. This state of things lasted during five or six years. Mme. M——, married, had a child which she nursed for the space of eighteen months. Her pregnancy had presented nothing to be noticed particularly. Some time after, without any known cause, Mme. M—— lost completely the faculty of perceiving odors, and for three or four years has not recovered it. She has received no treatment until the present time. Actual state: The nostrils present nothing unusual in their appearance; the air circulates freely through them. They are a little dry. Mme. M—— has noticed that when she drinks wine she does not perceive the taste of it. Different kinds of cheese do not give her the sensation of the salt contained in them. She does not perceive the flavor of different foods, she has only the sensation of sweetness, of bitterness, of salt, of sugar and of acids. Odors, agreeable or disagreeable, are not perceived. Ammonia brings on a tingling sensation, but the smell of it can not be determined.

Treatment:

℞	Syncopodium,.....	gr. 4.00
	Pulv. sacchari,	" 1.00
	Veratrim.....	" .04

At the end of two months there was no amelioration of the symptoms. Mme. M—— has ceased all treatment ever since, her health has continued to be excellent, but the sense of smell has not returned.

Before consulting me, this lady had seen a physician, intelligent in other matters, and very much in renown in the country, who, attributing the loss of smell to the presence of a cerebral tumor, had proposed a most energetic treatment: a seton in the neck, repeated purgation, etc. Not finding any symptoms of cerebral lesion I thought the anosmie was purely nervous, and I confined myself to making her inspire doses of a powder compounded with veratrim. This treatment resulted in nothing, and for seven years past the patient has been deprived of the senses of smell and taste; but she has not experienced any cerebral symptom which would justify the first diagnosis that was made as to the cause of her anosmie.

Observation VIII.—*Essential Anosmie*.—Petit, aged eighteen years. Temperament lymphatic, of habitual good health, a little feeble in her childhood, subject to having colds but not coryzas; very regular. She has an aunt who has lost the sense of smell, and who is made the subject of observation sixth. October 3d, 1869: It is seven or eight months since, without any appreciable cause, she lost the sense of smell. She does not know whether the loss of this sense came on suddenly or in a gradual manner. At the same time she lost the taste of savors, with the exception of those of sugar, of salt and of bitterness. She has always sniffed a good deal, and soiled a pocket handkerchief every day. Since she has lost the sense of smell the nasal secretion has neither augmented nor diminished. Air passes freely through the nares. The mother of this young lady noticed, by chance, lately, that she had lost the sense of smell. She had never spoken of it to her, and would not have consulted me at all, if her mother had not been frightened in regard to the matter, and obliged her to do so.

Treatment:

R	Pulv. orris.....	} aa gr. 2.00	
	" marjoram.....		
	" cerrallovia.....		
	" hellebore (white).....		.50 M.

A dose morning and evening.

This powder produced much sternutation, but it has had no effect, and to-day, the 20th of January, 1870, the young lady is exactly in the same state.

It is to nervous anosmie that it is necessary to connect the following case reported by Dr. Graves:

Observation IX.—*Essential nervous Anosmie*.—A military president having charge of the cleaning of infected sewers had suffered greatly from the disagreeable emanations which were disengaged therein. The next day he noticed that he had lost the sense of smell entirely. Thirty-six years have passed, and he still remains deprived of this sense. The same way that a too brilliant light may produce amaurosis, so will the influence of a very strong odor produce paralysis of the olfactory nerves.

The reading of the three preceding observations will justify perhaps the title of essential anosmie or nervous anosmie under which I have arranged them.

In effect, if I have not placed them among the number of cases of anosmie arising from atrophy of the olfactory nerves, it is because up to the present time, in the post mortems made by M. Prevost (loc.cit.), the diseases have been observed only among persons advanced in age; now here are attacked with anosmie young girls, (one aged twenty-one years, the other eighteen years.) In the case of Graves, the anosmie declared itself from one day to the next, after a too severe impression. It is very evident that atrophy of nerves can not be produced so instantaneously. It is then not to this lesion that we must attribute this loss of smell. That it might have been something else, is possible, probable at the same time; but, in waiting until it is known to us, we arrange these cases under a heading which prejudices nothing. That atrophy of the nervous filaments is produced subsequently, in the long run, by reason of deficient exercise of the function, would be nothing astonishing; but at the *debut* of the functional lesion, here is where it seems to us unlikely. There is a cause of anosmie which is, maybe, more frequent than we suppose, to which I wish to call attention, that is, falls upon the head accompanied or not by fracture of the skull. We may then designate this sort of anosmie under the name of traumatic anosmie. Already certain cases of this kind have been described, but without details and for the purpose only of describing curious cases. We find, for example, in the Thesis of Pressat, (loc.cit.) the following observation derived from *Ephemerides des curieux de la nature*: A man of sixty, named Buchsentein, wishing to examine in a cellar the state of his puncheons of wine, fell suddenly from the ladder, and by this fall lost all sense of smell during the remainder of his life.

The first case of this sort that I have met is the following:

Observation X.—*Traumatic Anosmie without fracture of the skull; preservation of taste.*—M. Dup——, aged twenty-nine years, presented himself for examination the 9th of February, 1854. He has never had any neuralgic or rheumatic affection, has always been in very good health, and has a good constitution. The 22nd of July he fell from his horse upon the top of his head, he lost consciousness for about the space of an hour. A physician called to the place, bled him, and the wounded man became conscious. In his fall he had received not an excoriation or wound; the summit of his head only presented a consid-

erable tumefaction of the scalp, which disappeared at the end of six or seven days. Two or three days after the accident he noticed on his handkerchief some small clots of dry blood, but there had been no epistaxis, no serous discharge nor bleeding at the ears, no trouble of sight or of hearing, no weakness in the arms and legs. Shortly, after seven days of rest, he arose and resumed his occupations. Some days after, wishing to smell a flower, he discovered that he had lost the sense of smell, which, before, had been very acute in him. Since then this sense has been abolished without returning. Nevertheless the taste has preserved all its integrity. He distinguishes very well the wines of different flavors, the flavors of food, such as vanilla, orange flowers, truffles, cheeses, etc. and, a remarkable thing, if he closes his nose and tastes different kinds of food the taste is lost, and he has no longer anything but the sensation of salt, sugar, bitterness and of acidity. In order that the savors may be perceived it is necessary that the air circulates freely in the nasal fossa. In order to see the effects of ammonia or of acetic acid, the experiment was tried of administering both: he could not distinguish one from the other. He experienced only a stronger sensation of tingling from the ammonia. He can not tell ether from chloroform. In a word the sense of smell is abolished completely.

Observation XI.—*Traumatic Anosmie without fracture of the skull.*—It is now about twenty years ago that M. B., notary at Liseaux, who to-day is aged sixty, being in an uncovered wagon, fell out and was thrown some distance. In his fall he struck his head violently, was stunned, but did not lose consciousness. He picked himself up, some drops of blood flowed from his nose, and he then returned on foot to his house, distant some three kilometers. The days following he had no cephalgia nor any cerebral symptom, no serous discharge from the nares or from the ears, and, aside from the numerous ecchymoses which showed themselves upon the face, and prevented him from going out, he could resume at home his habitual occupations. But, beginning from this moment, he lost completely the sense of smell, and taste was in part destroyed. He had been in the habit of taking snuff and he kept it up, not that he perceived the smell of tobacco, but by reason of the feeling of tingling that it determined in the nares, and the sneezing that it produced. He

perceived only salt, sugar, acids and bitters, but he tasted neither wine, coffee, nor any of the substances which have an aroma, and, strange to say, he continues to take coffee all his days, nothing seems better to him than a cup of sweetened water very hot and slightly bitter.

I have collected on purpose the two former observations; they are, in effect, very nearly alike, and give rise to the same considerations. In the two cases there had been a fall upon the head; in the first there followed the loss of consciousness, but it lasted only an hour; the second did not lose consciousness, and definitively in both cases there had been no sign of fracture of the skull. The first resumed his occupations at the end of seven days, the second was not even confined to bed. In the meantime both of them presented a common symptom; the fall had taken effect upon the summit of the head, and there had been a slight discharge of blood by the nares. Is it due to a destruction of the Schneiderian membrane, or to a cracking of the ethmoid? This is what we can not tell. However, it always happened that this fall has been followed by the loss of smell of a definite kind.

Observation XII.—*Traumatic Anosmie; fracture of the skull.*—A workman, aged thirty-five years, working in one of the shafts of a railroad tunnel, was struck from a height of about seven metres by a large weight which fell upon the summit of his head. There was a considerable wound. He could not tell whether there had been any discharge of blood by the nose or by the ears. He lost consciousness on receiving the blow, and for twenty days he did not know what transpired about him. He finally convalesced, but he had lost the sense of hearing on the right side, and the sense of smell in both his nostrils.

To-day, the 1st of August, 1854, one year after the accident, his condition is as follows: all his functions are normal, his health is good, intellect very bright, memory fine; only if he wishes to work, to use a pick or trundle a wheelbarrow, he becomes seized with a dizziness and falls to the earth. He is subject to a buzzing in the right ear in which he is deaf, and often has giddiness and cephalgia. The sense of smell is lost completely, he has only the taste of sugar, salt, bitterness, of heat and cold. He perceives no other savors. If he snuffs he feels a great deal of tingling, which makes him lachrymal, but he

does not notice the smell of tobacco. He continues nevertheless to smoke and chew from habit. If he takes coffee it tastes to him like sweetened hot water.

Though in this observation we may have to regret the absence of many important details, and ignore the fact that there had been a discharge of blood and serosity from the ears and nose, it is difficult not to admit the existence of a fracture of the skull. For instance, this man after having received a blow upon the top of his head, remained twenty days unconscious, and at the same time lost the sense of smell, and the hearing on one side. Furthermore, certain cerebral symptoms, slightly unfavorable in the beginning, still persisted. We are then justified in placing this observation in the same category as those that follow.

Observation XIII.—*Traumatic Anosmie; fracture of the skull; re-establishment of the senses of smell and taste at the end of three months.*—Cheron, aged forty years, received some years since, a blow from the butt of a gun over the right ear. He remained stretched out in the rays of the sun for several hours without consciousness. Abundant discharge of blood from the right ear, followed by a discharge of serosity which continued for several days; no paralysis of the extremities. Loss of smell and of taste. Treated with energy by Dr. Hue, from whom I derived these details, leached him behind the ears for several days; calomel internally. He convalesced, but smell and taste did not return until about the end of three months; as regards the hearing, completely abolished in the right ear only, its function is not yet re-established.

Observation XIV.—*Traumatic Anosmie; fracture of the skull; re-establishment of the senses of smell and taste at the end of six months.*—Lefevre, aged forty-eight years, fell from a height some five years since, and struck his head near the right ear with great violence against a stone. The wounded man remained in an unconscious state for the space of twenty days. There was a discharge of blood and afterwards serosity from the auditory canal. No paralysis of the limbs. Treated energetically by general bleeding at the beginning, then leeches placed behind the ear, and calomel internally, the patient convalesced promptly.

CASE OF PUERPERAL HYSTERIA.

By A. C. WEBB, M. D., Cincinnati.

Thinking the following case to be in many respects a peculiar one, and not devoid of interest, I take the liberty to report it.

On May 10th, of this year, was summoned to Mrs. M. to attend her in her expected confinement. Found her to be a large, robust, German woman, aged twenty years, primipara. Her husband had died but two weeks before, she having been his sole nurse through a lingering illness.

She was suffering some slight pains, but not of an expulsive nature. On examination, found no dilatation, the womb not subsided in pelvis. She insisted that she was already over her time. Left her, promising to call next day.

May 11th. No change in character of pains, which are of a wandering nature. Ordered potass. brom., fifteen grs. every two hours. Left her comparatively easy.

May 12th, morning. Suffering greatly, hysterical symptoms being present in a marked degree. Ordered pills assafoetida, three, daily, together with chloral hydrate and potass. brom. of each fifteen grs. every four hours, under which she became quiet, and subsequently passed a very comfortable night, the effects of the chloral hydrate being quite marked.

May 13th, 3 o'clock, P. M. Found patient in a maniacal state, muttering, picking at bedclothes, but unconscious of the presence of Dr. Orr, who was in attendance. At 4 o'clock, P. M. these symptoms culminated in a violent convulsion. Chloroform was administered, and the convulsion subsided. 9 o'clock P. M. Patient not suffering much, but seems much exhausted; pulse but fifty-four beats per minute and of little force. The dose of chloral had been gradually increased, so that she was now taking forty-five grains every three hours with manifest advantage. Throughout the next day she remained feeble. Ordered beef-essence, eggs, milk, etc. Chloral to be continued as she was still somewhat hysterical.

May 15th, morning. Suffering greatly. Afternoon, another violent convulsion, during which it required all the strength of the attendants to keep her from injuring herself. Chloroform was again given. It now became evident that the hysterical

excitement was due to impressions transmitted from the womb to the nervous system, and would only cease on delivery.

From this date up to June 1st the history of each day was the same, the patient having every morning and evening convulsions almost tetanic in character, but ushered in always by the globus hystericus and feeling of suffocation. These spasms were usually treated with chloroform, which, however, sometimes failed to produce any effect. The bowels were kept open with podophyllin and colocynth, followed by magnesia. Other antispasmodics having been fully tried without effect the chloral was continued alternately with potass. brom. in doses ranging from eighty to sixty grains.

June 1st. Hysterical tendency gradually subsiding.

June 6th. No convulsion, and patient has sufficient strength to sit in her chair for some hours during the day. All medication suspended until June 11th, when the hysterical symptoms returned, and the chloral was again given with good effect. Patient complains of a feeling of weight in pelvis.

On June 14th labor set in, being in no way remarkable save for severity, a healthy male child being born.

The patient suffered from retention of urine for a few days, and during this time had two more convulsions, but the retention being overcome they did not return, and she was in her usual state of health in two week.

The case was seen by Drs. Davison, Fishburn and Hall, who acquiesced in the diagnosis and treatment.

MEDICAL GLEANINGS.

(From Richmond and Louisville Medical Journal.)

HEMORRHOIDS.—Dr. John H. Packard, of Philadelphia, in an article on the above disease, says: That one of the greatest conveniences in the examination of the rectum or any of the orifices of the body, is the forehead mirror used by the laryngoscopist. It obviates the annoyance of the surgeon having to dodge the shadow of his own head. While his hands are left free, he can, by changes of his head, throw the light just where he wants it, notwithstanding the movements of the patient; can be used at night or in a dark room.

Various kinds of speculums are mentioned, the surgeon using that which pleases him best. In the male subject the disease

may be brought completely into view by straining over warm water so as to protrude it; in the female, by the simple plan now to be mentioned: by passing the finger into the vagina, and then turning it backward so as to hook it over the upper edge of the sphincter ani, the rectal mucous membrane may be pushed down and everted so as to expose it for one or two inches. This idea is one of Dr. Storer's, of Boston. Advantage may sometimes be gained by the use of both fore-fingers, left in the anus and the right in the vagina, in estimating the actual bulk and extent of the hæmorrhagial tumors, etc. In the male we must, of course, be satisfied with the introduction of the finger into the rectum, which ought, in my opinion, always to be done in addition to the other investigating methods. Among the causes of hæmorrhoids, too little stress has been laid upon hereditary title.

Symptoms.—Another point which ought to have attracted more attention is the amount of sympathetic uterine symptoms which may be developed by hæmorrhoids. Great distress may be induced by the grasping of piles by the sphincter, although there is no protrusion whatever. This symptom is much less troublesome in cases where the sphincter has become lax, and prolapsus ani is of constant occurrence; hence it is a feature of the earlier and more manageable stage of the complaint.

Treatment.—In some cases, as in pregnant women, the trouble is due to a temporary cause, and will be relieved by its cessation. In others the rectal lesion has lasted so long, and has become so aggravated, with relaxation of the parts, that, especially in persons past the middle age, it is better to resort to palliative measures only. In other cases, again, and above all, where a strong hereditary tendency exists, a radical and most palpable cure can be effected by judicious surgery.

One principle should govern us in all the palliative measures adopted in any case of piles, namely, to prevent straining. This may be carried out in various ways. Besides proper and nutritious food, there are four points to be attended to. By means of medicine we keep the bowels easily moved; sulphur with molasses or small doses of epsom salts, etc., etc., will do this. The second measure is mechanical; an opening about five inches wide by fourteen long, is made in a board, to place over the privy-seat, which allows the nates to bulge down too much, this will, in a great degree, prevent the protrusion of the relaxed rectum. The third is the use of astringent suppositories, to be used after each stool. The fourth measure is the employment of a hemispherical block of ivory or vulcanized rubber, about as large as half a billiard-ball, attached to a spring of properly adjusted strength, and this fastened to a belt. When in place it supports the parts, and prevents the descent in walking.

Operative Measures.—Internal piles may almost always be safely and effectually removed by ligation, and external by the knife or scissors. The cases which give the most trouble are those in which the two forms are combined.—*N. Y. Medical Journal.*

TUBAL PREGNANCY—*Spiegelburg: Arch. fur Gynakologie.*—The only authentic case of tubal pregnancy, in which the fœtus attained maturity, is related by Saxtorph, and the history of this case is not sufficiently minute to be made use of; so that the full clinical report of a similar case, which occurred in the practice of Spiegelburg is of great interest. The patient was a peasant woman, forty-four years old, pregnant for the fourth time, and had reached the end of gestation without any abnormal symptoms, when fugitive labor-pains were soon followed by convulsions, coma, rapid prostration, and death in a few days. The urine was albuminous, and contained urinary casts. A *post mortem* examination disclosed a fully developed dead fœtus, enclosed in membranes, and lying in a musculo-membranous sac which was formed by the distended and developed fallopian tube, the placenta having its attachment anteriorly. A minute microscopic report, by Waldeyer, confirmed the opinion that it was only the tube which had taken part in the development of the sac. Bundles of muscular tissue were found, the tissue of the ovary recognized microscopically, and, by careful manipulation, the folds of the right broad ligament were separated from one another up to the point where the sac commenced, which thus correspond with the position occupied by the fallopian tube, while a probe passed from the angle of the uterus into the sac along a short canal. Spiegelburg explains the fatal termination of the case by the eclampsia of the mother causing the death of the fœtus, subsequent separation of the placenta, hæmorrhage into the sac, which was already distended to its utmost capacity, rupture and death from peritonitis. The diagnosis was not made during life, owing to the normal course of the pregnancy, and the fact that the tumor corresponded so closely in position and size with the gravid uterus.—*Medical Times.*

TINCTURE OF VERATRUM IN PNEUMONIA OF CHILDREN.—Dr. Jacobi, in a clinical lecture before the New York Medical Journal Association, says: In the acute pneumonia of a baby, I would give a drop of the tincture every hour; to a child four or five years old, perhaps two drops every hour. If the attendant is intelligent enough to count the pulse, I say bring down this pulse to one hundred and ten or one hundred, but not lower; because when the pulse falls lower, the drug is apt to cause vomiting and temporary collapse. To obviate local irritation of the pharyngeal or gastric mucous membranes, I give the tincture

in barley-water. This drug has no cumulative effect like that of digitalis. It will bear combination with quinine, and I think this is an important point. I often combine quinine with veratrum or digitalis where I want to get, not a speedy, but a continued effect upon the pulse, especially in the pneumonia of a debilitated child, where you are in doubt about stimulating to any great extent; where you do not know whether you ought to commence with benzoic acid, camphor, etc., you will control the pulse better with quinine and veratrum than with the latter alone. I ought to add that, in most cases, it is advisable to combine opium or hyoscyamus with veratrum to obviate local gastric irritation.—*New York Medical Record*.

CAUTERIZATION IN DIPHTHERIA.—In the 48th *Versammlung Deutsche Naturforscher und Aerzte*, Dr. Schuller stated that he had entirely abandoned cauterization of the pharynx, larynx, or conjunctiva in diphtheria. In numerous cases he had, as a crucial experiment, cauterized only one side of the fauces, and he had always been led to the same conclusions:

1st That the membrane remained attached longer on the side which he had cauterized than the other.

2d. That even the most energetic application of nitrate of silver failed to arrest the reproduction or prevent the extension of the membrane.

3d. In some cases serious tumefaction and inflammation of the cervical lymphatics followed the application of the caustic.

In these views he was supported by Ebert, Stiebel, Cohen, Rinecker, and others, who direct the use of small pieces of ice to be constantly allowed to melt in the mouth, and employ a gargle of potass. chlor., alcohol, potass. permang., carbolic acid, etc.—*The Medical Times*.

SYMPATHETIC NERVOUS TROUBLES FROM THE PRESENCE OF A TENIA.—Two cases, mentioned by Dr. Maurin, (in *Sud Medical* No. 5, 1870, and *Lyon Medical*, April 24, 1870,) are interesting in this, that they might have given rise to a diagnosis of troubles of the nervous centres.

The first patient was a clerk, aged forty-two, who for fourteen months had experienced more and more serious illness. At first he suffered from dull pains in the epigastrium; these pains, after a while, took on the character of an intense gastralgia with inexplicable remissions and exacerbations.

A few months afterward he had some vertigo complicating the gastric pain. Finally, for eighteen months past, the gastralgia has yielded, but has been followed by a continued sensation of vertigo, a fixed pain in the nape of the neck and between the shoulders; sensation of falling forward when the patient walks up or down any incline; sensation of a soft body, like a cushion,

under the feet during the walk; fear of an imminent death; sudden inclination to commit suicide.

The second patient was a physician who experienced all the symptoms of a cerebral congestion; cephalgia, troubles of the intellect, incomplete amnesia, impediment of speech; the patient being gouty had fear of a metastasis; but a few articulations of tenia having been passed, the diagnosis was made, and, as in the preceding case, a dose of kousso, by producing the expulsion of a tenia, caused at the same time all his symptoms to disappear. —*New York Medical Journal*.

TREATMENT OF DELIRIUM TREMENS.—Concerning this vexed question, Dr. Murchison says (*London Lancet*,) in regard to—

1. *Alcohol*.—He allows none, except in cases where there is evidence of fatty heart, or an intermitting pulse, or some special complication, as phthisis. He has never seen any bad consequences from suddenly and completely cutting off the supply of alcohol.

2. *Food*.—Mild cases are often cured by good nutriment and abstaining from stimulants; but sleep will not follow this practice in severe cases, while in not a few bad cases there is congestion of the liver and stomach, and food of all kinds is rejected.

3. *Opium*.—In many cases opium has acted like a charm in speedily putting an end to the disease; while in others it fails entirely in inducing sleep, or may aggravate the symptoms, or even cause convulsions or coma. Is there no explanation of this difference? Is it possible to say when opium is likely to succeed or not? or must we, from being uncertain of the result, abjure the use of it altogether? He thinks an explanation of the difference is to be found in the state of the kidneys, as indicated by the character of the urine. Wherever the urine contains albumen as the result of recent congestion, or old disease of the kidneys, opium is almost sure to fail, and even prove injurious; and accordingly it is a good rule never to give opium until an opportunity has been offered to test the urine. But when the urine has been ascertained to be free from albumen, opium may be given without fear, and usually with the best results. It is best to commence with a full dose, and give a smaller dose every three hours afterward until sleep ensues. When the skin is dry, or the patient much excited, combine the opium with antimony in the manner recommended by the late Dr. Graves.

4. *Digitalis* is of undoubted power in the treatment of delirium tremens, and is particularly indicated in cases where the urine is scanty or contains albumen, or where the patient is very excited. He has known it to act most beneficially in cases where opium had failed. The large flow of urine following its use makes it

probable that it assists in the removal of deleterious matter from the blood. From fifteen to thirty minims of the tincture may be given with or without carbonate of ammonia, every four hours.

5. *Bromide of Potassium*.—In severe cases he has not found it alone of much service in securing sleep, although it has seemed to act beneficially in moderating active delirium or mental excitement.

6. *Hydrate of Chloral* is a remedy for inducing sleep which is particularly applicable to those cases where opium is contra-indicated. It does not, like opium, interfere with elimination by the kidneys. One caution is necessary with regard to it. Not only in delirium tremens, but in other diseases, the first action of the chloral (like that of an insufficient dose of chloroform) is exciting rather than sedative. You must not on that account infer that it is acting injuriously, for a second dose will often produce the desired sleep. The best way to give it is in doses of half a drachm every two or three hours until sleep results.

FUNCTION OF THE PROSTATE—Dr. Kraus, editor of the "Vienna Medical Times," says that he believes that he has discovered some essential points relating to the function of the prostate, but will, at present, only make some preliminary statements that he thinks will be found to deserve attention.

1. The seminal fluid, as long as it remains within the testes, vesicles, and other seminal passages, is colorless and scentless, being in appearance exactly like fresh honey while deposited in the comb; and in reaction it is neutral.

2. Only when it has quitted the passages and arrived in the urethra does it acquire its white color and its peculiar faint smell.

3. During its passage through the prostatic portion of the urethra, the prostate empties out its fluid, colors the semen white, and confers upon it the faculty of coagulating when exposed to the air (alkaline reaction.) Semen taken from the seminal vesicles does not coagulate, but remains clear, colorless and scentless.

4. The spermatozoa, in the absence of the prostatic fluid, can not live in the mucous membrane of the uterus of mammalia; but with its aid they may live a long time in the uterine mucous, often more than thirty-six hours.

From the above the conclusion may be drawn that the prostatic fluid exercises an unlimited influence on the viability of the spermatozoa, sustaining it when engendered by the secretions of the mucous membrane of the uterus.

This is undoubtedly the case with those species of animals

which possess a prostate, and he intends next to extend his investigations to those species which are destitute of this.—*Med. Times and Gazette.*

SPONTANEOUS GENERATION.—Prof. Tyndall (*The Doctor*, July 1, 1871) delivered during the month of June an interesting lecture at the Royal Institution, in which he dealt as follows with the problem that has lately excited renewed attention :

“As regards the lowest forms of life, the world is divided, and has for a long time been divided, into two parties, the one affirming that you have only to submit absolutely dead matter to certain physical conditions to evolve from it living things; the others, without wishing to set bounds to the powers of matter, affirming that in our day no life has ever been found to arise independently of pre-existing life. Many of you are aware that I belong to the party which claims life as a derivative of life. The question has two factors: the evidence, and the mind that judges of the evidence; and you will not forget that it may be purely a mental set or bias on my part that causes me throughout this discussion, from beginning to end, to see on the one side dubious facts and defective logic, and on the other side firm reasoning and a knowledge of what rigid experimental inquiry demands. But, judged of practically, what, again, has the question of Spontaneous Generation to do with us? Let us see. There are numerous diseases of men and animals that are demonstrably the products of parasitic life, and such disease may take the most terrible epidemic forms, as in the case of the silkworms of France in our day. Now, it is in the highest degree important to know whether the parasites in question are spontaneously developed, or are wafted from without to those afflicted with the disease. The means of prevention, if not of cure, would be widely different in the two cases.

“But this is by no means all. Besides these universally admitted cases, there is the broad theory now broached and daily growing in strength and clearness—daily, indeed, gaining more and more of assent from the most successful workers and profound thinkers of the medical profession itself,—the theory, namely, that contagious diseases generally are of this parasitic character. If I had heard or read anything since to cause me to regret having introduced this theory to your notice more than a year ago, I should here frankly express that regret. I would renounce here whatever leaning towards the germ-theory my words might then have betrayed. Let me state in two sentences the grounds on which the supporters of the theory rely. From their respective viruses you may plant typhoid fever, scarlatina, or small-pox. What is the crop that arises from this husbandry? As surely as a thistle rises from a thistle-seed, as surely as the fig comes from the fig, the grape from the grape, the thorn from

the thorn, so surely does the typhoid virus increase and multiply into typhoid fever, the scarlatina virus into scarlatina, the small-pox virus into small-pox. What is the conclusion that suggests itself here? It is this: That the thing which we vaguely call a virus is to all intents and purposes *seed*; that in the whole range of chemical science you can not point to an action which illustrates this perfect parallelism with the phenomena of life,—this demonstrated power of self-multiplication and reproduction. There is, therefore, no hypothesis to account for the phenomena but that which refers them to parasitic life.

“And here you see the bearing of the doctrine of Spontaneous Generation upon the question. For if the doctrine continues to be discredited as it has hitherto been, it will follow that the epidemics which spread havoc among us from time to time are not spontaneously generated, but that they arise from an ancestral stock whose *habitat* is the human body itself. It is not on bad air or foul drains that the attention of the physician will primarily be fixed, but upon disease-germs which no bad air or foul drains can create, but which may be pushed by foul air into virulent energy of reproduction. You may think I am treading on dangerous ground,—that I am putting forth views that may interfere with salutary practice. No such thing. If you wish to learn the impotence of medical science and practice in dealing with contagious diseases you have only to refer to a recent Harveian Oration by Dr. Gull. Such diseases defy the physician. They must burn themselves out. And, indeed, this, though I do not especially insist upon it, would favor the idea of their vital origin. For if the seeds of contagious disease be themselves living things, it will be difficult to destroy either them or their progeny without involving their living *habitat* in the same destruction.”

CARBOLIZED ATMOSPHERE IN THE TREATMENT OF BLOOD-POISONING.—In the London *Practitioner* for January, Dr. John Wood commends very strongly a new method of using carbolic acid, and reports two cases of severe traumatic erysipelas and one of pyæmia, in which he thinks recovery was largely attributable to the method of employment. To the cradle for keeping the bedclothes off the affected part, and to various projecting portions of the bed, he hangs little muslin bags containing a powder saturated with carbolic acid. In this way he saturates the atmosphere about the patient and the wound with the vapor of carbolic acid, and produces constitutional effects without disturbing digestion. In the pyæmic case the breath and urine were very strongly impregnated with the acid, and the latter for a week had the characteristic slate-colored film and deposit. This deposit was analyzed, and was found to be identical with blue indigo, and, therefore, was probably formed by a trans-

formation of the yellow indigo of the excretion. The pyæmia followed a wound of the right hand. The case was remarkable for the complete and rapid recovery of the patient, with a stiff knee-joint, after the total necrosis and removal of the patella through a free opening for the evacuation of the pyæmic abscess of the joint.

NASO-PHARYNGEAL POLYPUS.—Mr. Cooper Forster (*Lancet*, May 20, 1871) reported the following case to the Clinical Society of London. The patient was nineteen years of age, and had a large growth filling up the left nostril, firm, fleshy, and fibrous, and covered with mucous membrane. The right nostril was not much interfered with, there was no swelling of the face or fullness of the palate, nor any projection in the throat. Chloroform was given, and a wire snare put round the growth, which broke off, and bled profusely. Mr. Forster then made a further examination, and, having passed his finger up the nostril, found an enormous growth, which could not be circumscribed, but large portions of which he tore away with forceps. Four days after the operation, the patient suddenly became unconscious. The right half of his face was numb, and, though he rallied, he was never able to speak except to say "too-too." The temperature rose to one hundred and two degrees F. He had three convulsive fits on the seventh day, and became totally unconscious, and died twelve days after the operation. The post-mortem examination showed general arachnitis, and sloughing of the brain about Broca's convolution. That portion of the growth which had not been removed occupied the left side of the external base of the skull, and filled the space between the greater and lesser wings of the sphenoid, the orbital plate of the frontal, and the cribriform plate of the ethmoid bone. It had extended from the nasal fossa by way of the sphenoidal fissure into the back of the orbit, but without damaging the optic nerve. The cribriform plate of the ethmoid was broken; and at the back part there was a small opening about a quarter of an inch in diameter, and a fracture extending forward from the opening. Microscopic examination showed the growth to consist of small fusiform cells and stellate connective tissue.

DETERIORATION OF MILK IN FEEDING-BOTTLES.—Prof. Gunning (*Med. Times and Gaz.*, May 6, 1871), the Government Analyst at Amsterdam, writes, "I object to the infants' feeding-bottles in all instances where any part of them is composed of caoutchouc or india-rubber, or any like material. There is nothing so ill suited to the constitution of the human body as the material in question. When, in consequence of suction, the pores of the caoutchouc are enlarged, some portion of the milk always remains behind in them, which cannot, or at least cannot with-

out great difficulty, be removed. This milk quickly becomes bad, and spoils the fresh milk with which it comes in contact. The caoutchouc material in question is made up of several ingredients. White zinc, or white lead, is very commonly employed, which is very poisonous. My objections are not founded exclusively upon *a priori* conclusions. In this country many fatal cases have happened among infants, which on solid grounds may be ascribed to the use of these bottles."

VACCINATION.

As we are at present threatened with an epidemic of small-pox, the subject of vaccination forces itself upon our attention. There can be no doubt about the efficacy of vaccination as a preventive of small-pox, and therefore the question that naturally arises is, how can it be best carried out?

There is a class of individuals that may be called vaccino-phobists who object to vaccination on the ground that not only does it not afford protection to the individual, but is also in many instances the means of producing irreparable injury to the system. It would seem scarcely necessary to notice such foolish objections, but if anything were wanting we have only to refer such persons to the reports lately published on this subject. Dr. Bridges of the Temporary Hospital for small-pox, at Hampstead, England, states that of 280 patients admitted during the late epidemic, 196 had been vaccinated and 84 were unvaccinated; among the vaccinated 8 deaths occurred or four per cent., while among the unvaccinated 27 deaths occurred or thirty-two per cent.

Dr. Cortis, a member of the Metropolitan Sick Asylum Board, mentions in support of vaccination, that out of 200 patients admitted into the Hospital, one third of the deaths occurred among those who had not been vaccinated. While among those who had been vaccinated only one in twenty-four fell victims to the disease, and they were chiefly among those advanced in life, and who had partly lost the protecting effects of early vaccination. And Mr. Simon, medical officer of the Privy Council, England, in his report to the Parliamentary Committee on Vaccination, mentions that in Rotterdam, with a population of 121,000, the deaths from small-pox per week were 116. At the Hague with a population of 92,000, a still higher rate prevailed, viz: 121 per week. This great mortality was owing to the fact that in Holland the vaccination of children was deferred until they were over seven years of age.

In order to prevent the spread of an epidemic, stringent rules should be observed and enforced, and public vaccinators appointed in all towns and villages. In Toronto the matter had been taken up by the Council, and public vaccinators appointed,

one for each ward, and the authorities of other cities, towns and villages should do likewise. But while every facility is made for the proper and careful performance of this duty, by the appointment of medical officers, an effort should also be made to enforce parents and guardians to present their children for vaccination.

It is generally believed that the best time for the vaccination of infants is about the sixth week. This period for vaccination is rigorously enforced in London, England, unless from the extreme delicacy or ill health of the child, it can not undergo the operation. Hebra states that in Vienna it is the custom to vaccinate in early infancy, and that infants of ten to fourteen days old are often vaccinated without any injurious effects being observed, and he also advocates vaccination at this age. He seems to think that several marks are not necessary in order to secure the person against small-pox. Whilst other writers, especially English, consider that three, four or more vesicles are absolutely necessary to afford protection. Many good practitioners are of the opinion, however, that it is not so much the number of vesicles, as the successful nature or perfection of the vesicle which affords the best security. Great care should also be exercised in the selection and preservation of vaccine matter. The seventh or eighth day is usually considered the best time for the selection of lymph for future use, and this may be done by putting it between square plates of glass, or on ivory points or points made from goose quills, or by hermetically sealing it in capillary tubes, care being taken that the lymph may not be destroyed by the heat. Crusts are the most convenient form for general use in the country, but great care should be taken in their proper preservation; they should be first enveloped in fine tin foil and bibulous paper then coated over with wax, and afterwards covered again by tin foil, and kept in a moderately cool place. They should never be carried for any length of time in the pocket, as the heat of the body will be certain to affect them by producing a kind of fermentation or decomposition, and accidents have not unfrequently occurred from vaccination with such matter. The lance, which after all is preferable to any other instrument, should be perfectly clean and sharp.

Some have supposed that lymph when transmitted from arm to arm for many years, or what is called long humanized, loses its effect to some extent, and therefore it is recommended to renew it occasionally from the cow. This is a very important subject, and one regarding which there appears to be a good deal of difference of opinion, and in the present state of our knowledge it would seem to be the wisest and safest course to renew occasionally. Humanized virus, which is two or three removes from the cow, would seem *cæteris paribus* to be most certain in its action, and therefore best calculated to afford protection.

The subject of revaccination is another subject which has lately engaged the attention of the medical profession in England. Mr. Simon, the medical officer of the Privy Council, has recently published an important memorandum on this subject. He believes that, by a successful vaccination in infancy, most persons are insured for a lifetime against an attack of small-pox; and that, in the proportionally few cases where the protection is less complete, it will, on account of the vaccination, be generally so mild as not to threaten death or disfigurement. There is, unfortunately, a vast amount of imperfect vaccination, and consequently every population contains many persons who, though nominally vaccinated, are liable to the disease. It is, therefore, advisable that all persons who have been vaccinated in infancy, should, as they approach adult life, be revaccinated. The best time for this is about the time when growth is about completing itself, that is, from fifteen to eighteen years of age. If, however, there is prevalence of small-pox in the neighborhood, or if individuals are exceptionally exposed to infection, the age of fifteen should not be waited for, especially in the case of young persons in whom the marks of previous vaccination are unsatisfactory. Revaccination, once properly and successfully performed, does not appear ever to require repetition. In proof of this assertion, he states that the nurses and other servants of the small-pox hospital, when they enter the service, are invariably revaccinated; and so perfect is the protection that, though the nurses are in constant attendance on the patients, and the other servants are in various ways exposed to the contagion, during thirty-four years there has never been known an instance where any one of them has ever contracted this disease.—*Canada Lancet*.

CHLOROFORM IN PARTURITION.

By D. S. FIELD, M. D., of Jeffersonville, Indiana.

Having had such *decided* and gratifying results from the employment of this agent in cases of obstetrics, lately, I have thought it might be of use to the timid to give a history of two cases coming under my observation quite recently:

The first was a lady in her first confinement—well developed, full term, good health, and promising an easy time. Taken with pains at 4 P. M., became more and more serious, till 8 o'clock, when I was sent for: found her, upon examination, with head presentation; occiput to left acetabulum, head lodged; back pains agonizing; she *wild* and unmanageable with pain; labor at a *stand*. The folks being afraid of chloroform, I used teaspoonful doses of laudanum every hour to stop said pains, and bring on uterine contractions; gave it in drachm doses every half hour for some time, finally giving three drachms at one dose. After

waiting a sufficient time for its effect, and failing to obtain the same—my patient still wild and restless with sacral pains—I ventured the chloroform, when the most delightful and pleasing effect was experienced by my patient. When the agent was withdrawn for but a moment, she would plead for it, and I finally, after using it some time, was gratified in the highest degree, as were the attendants, to find the child in my hands, after but two or three natural efforts.

The last case was a primipara—twins—presentations natural—labor going on smoothly till head became engaged in the inferior strait, where the most exhausting and distracting back pains ensued, putting a check on any further uterine contractions and after having given chloral and laudanum faithfully, with no good results, I resorted to chloroform again, which gave entire relief in a moment, when no more trouble or delay was sustained. I am satisfied there is no agent equal to this in obstetrics. In the cases recited, the ergot was employed also.

AN UNRUPTURED HYMEN COMPLICATING LABOR.

By P. S. LEISENRING, M. D., Annville, Pa.

On the morning of May 27, 1871, I was called to see Mrs. B. in her first confinement. She is a well-formed, healthy woman, aged 28; has been married over two years, and has always enjoyed good health, except at her menstrual periods, when she has suffered greatly. On my arrival, I was told that she had been in labor for several hours. I found her pains regular and tolerably severe. In attempting to make an examination, I was very much surprised at finding the vagina completely closed by an *unruptured hymen*. I carefully examined for an opening large enough to insert the end of my finger, so that I might enlarge it sufficiently to make the necessary examinations and deliver the child, but could find none, the hymen forming a complete septum, closing the vagina with a dense, thick, unyielding membrane, through which I could feel what I supposed, and what afterwards proved, to be the head of the child. After using considerable force with my finger to rupture the hymen, and failing to do so, I explained to the family the nature of the difficulty, and informed them that the only remedy was an incision, assuring them that there was no cause for alarm. On making a careful ocular examination, I found about the centre of the membrane a small orifice, large enough (after some effort) to introduce an ordinary female catheter. I inserted a grooved director, and with a sharp bistoury made two incisions large enough to introduce my finger, with which, after considerable effort, the opening was gradually enlarged. I found the *os tincæ* dilating nicely and labor progressing favorably. After five hours of

severe labor, the external parts being excessively rigid, I delivered her of a plump, healthy female child. She had a speedy recovery.

In upwards of nineteen years of active practice, this is the first case of the kind I have met with; and on inquiring of a number of old practitioners, I learn that none of them has ever met with a similar case. I find, also, that most of the authors on obstetrics do not mention an unruptured hymen as one of the causes of difficult labor. Ramsbotham, in his excellent work, mentions but two cases having been met with in his own and in his father's practice. Dewees mentions having been called in consultation to one case. Bedford and other authors do not refer to the matter at all. I can scarcely understand how my patient became impregnated through so small an opening. It proves beyond a doubt that an *unruptured hymen is not an infallible test of virginity*. Although my patient had been married for more than two years neither she nor her husband knew of the existence of the hymen.—*Phil. Medical Times*.

NOTE ON HYDROCYANATE OF MORPHIA.

By Prof. J. M. MAISCH.

Among the descriptions of morphia salts, as furnished by various chemists, the hydrocyanate is not enumerated. In Gmelin's "Chemistry" some double hydrocyanates are mentioned, but not the simple morphia salt; and, as far as I know, nothing is known of its formation or its properties.

A prescription having been received, calling for 1 grain each of acetate of morphia and cyanide of potassium in a 3-ounce mixture, the separation of needles was observed before the medicine was handed out; they were separated by straining, and found to be a salt of morphia. Although granulated cyanide of potassium was used, it was still possible that this salt might have been impure, and the formation of the crystals due to some impurity.

Pure hydrocyanic acid was therefore neutralized with ammonia, and the aqueous liquor diluted, so that it contained in each fluid drachm 1 grain of pure cyanide of ammonium. This solution was experimented with like the solution of cyanide of potassium. The following contains the results of the experiments thus far obtained:

1. A neutral solution of a morphia salt, even if diluted to the proportion of 1: 1500 (1 grain in $3\frac{1}{2}$ oz.) yields with a neutral cyanide a crystalline precipitate consisting of hydrocyanate of morphia.

2. After the crystals have separated, the filtrate, acidulated with nitric acid, yields no precipitate with the iodohydrargyrate of potassium; the morphia hydrocyanate, therefore, if soluble at all, dissolves but very sparingly in water.

3. The solubility of the morphia hydrocyanate appears not to be increased by an excess of the precipitant.

4. The precipitate is readily dissolved if the liquid is slightly acidulated by a mineral acid; it is likewise soluble in acetic acid, and for this reason does not appear in a mixture containing syrup of squill.

5. Hydrocyanic acid does not precipitate a neutral solution of morphia.

It is obvious from the foregoing that morphia salts ought not to be prescribed simultaneously with neutral cyanides, except enough acid be added to retain the hydrocyanate of morphia in solution.—*American Journal of Pharmacy*.

FREE MEDICAL LIBRARY OF CINCINNATI.

MR. EDITOR:—We have now the foundation laid for a splendid medical library for the profession of our city. The rooms are now open, and the best medical journals in the world—English, German and French—lie upon the tables awaiting the inspection of our medical men, free of charge. This library is in the Public Library building on Vine Street, but has no other connexion with that institution, deriving its support from an entirely different source of maintenance. Some history of its origin and manner of support will no doubt be interesting to the profession.

It is known that for a long time students have been charged an entrance fee when attending the clinical lectures at our city hospital; this sum last year amounted to some sixteen hundred dollars, and until recently was always thrown into the general fund, and spent in maintaining that institution. The steps by which it has been diverted to other and better uses may be seen by the following resolutions and proceedings:

HALL OF THE ACADEMY OF MEDICINE, Dec. 20, 1869.

DR. TATE presented the following resolution:

Resolved, That the Legislature of Ohio be respectfully petitioned to alter the law establishing and maintaining the Cincinnati Hospital, so that the money received from the sale of tickets to medical students shall be set apart as a special fund, to be used only in creating and maintaining a Medical Library and Museum in connexion with that institution, which shall be open to all physicians of Cincinnati free of charge. Seconded by Dr. Thornton.

The resolutions were supported in a few remarks by Drs. Jute, Thornton and W. B. Davis, and opposed by Drs. Seeley and Whitaker: they were passed by an overwhelming majority.

The following gentlemen were appointed to memorialize the Legislature upon the subject, viz., Drs. Tate, Thornton, Patton, Unsicker, Muscroft and Walker.

HALL OF ACADEMY OF MEDICINE, June 13, 1870.

REPORT OF COMMITTEE.

DR. TATE presented the following:

The committee—to whom was referred the resolutions passed by the Academy in reference to procuring an Act of the Legislature by

which the money received from medical students as a hospital fee should be diverted from its present uses, and employed as a fund to establish and maintain a medical library and museum for the use of the profession, beg leave, finally, to report that, shortly after the organization of the committee, all the members elect of the Legislature from this county were seen, and that, with entire unanimity, they agreed to favor the wishes of the Academy.

Soon after the beginning of its last session Captain Haldemann, of this county, introduced into the Legislature a bill based upon the resolutions of the Academy; and this bill, with some slight amendments, passed both branches of the Legislature, and is now a part of our Statute Law. It was in the form of an amendment to Sec. 5 of an Act regulating the Cincinnati Hospital, passed March 11, 1861. That portion of it which relates to the matter in question now reads as follows:

THE LAW.

"The trustees may affix to the introduction or admission into the hospital of the pupils of said college, or other medical students, such fee as they may deem proper; but the same shall be alike as to all, and shall be paid to the treasurer of Cincinnati, and be used as a fund for establishing and maintaining a medical library and museum for said hospital; and the said Board of Trustees shall appropriate from time to time, and apply said fund for the purchase of a library of scientific books and specimens and illustrations directly connected with, and collateral to, the cultivation of medical and surgical science; which shall be open at reasonable hours to all physicians of Cincinnati, and to all such pupils and medical students admitted to the privileges of said hospital, free of charge."

The hospital fee above alluded to had been previously fixed at five dollars for each pupil, and last year yielded about sixteen hundred dollars. This sum will be increased from year to year as the number of students resorting to our city for instruction shall be multiplied; and it is, therefore, confidently believed that in a very few years the physicians of Cincinnati will have access to the finest medical library in the country.

The profession and the Academy may well be felicitated on the success of this movement.

(Signed) JNO. H. TATE, *Chairman*.
 W. P. THORNTON,
 C. S. MUSCROFT,
 J. P. WALKER,
 G. R. PATTON,
 J. S. UNZICKER, } *Com.*

T.

Book Notices.

THE PHYSICIAN'S PRESCRIPTION BOOK. By JONATHAN PAREIRA, M. D., F. R. S., fifteenth edition. Philadelphia: Lindsay & Blakiston. Cincinnati: G. E. Stevens & Co. 18mo. pp. 286. 1871.

This little work contains lists of the terms, phrases, contractions and abbreviations used in prescriptions, with explanatory notes. The

grammatical construction of prescriptions; rules for the pronunciation of the pharmaceutical terms; a prosodial vocabulary of the names of drugs, etc.; and a series of abbreviated prescriptions illustrating the use of the preceding terms. Students and physicians will find it a very useful work for the study of prescription making, which very many are deficient in, and we can cordially recommend it for that purpose.

A MANUAL OF MIDWIFERY, including the Signs and Symptoms of Pregnancy, Obstetric Operations, Diseases of the Puerperal State, etc., etc. By ALFRED MEADOWS, M. D., LONDON. Member of the Royal College of Physicians, etc. First American from the Second London Edition, revised and enlarged, with illustrations. Philadelphia: Lindsay & Blakiston. Cincinnati: G. E. Stevens & Co. 8vo., pp. 487. 1871.

It has been the effort of the author of this work not only to prepare a student's manual, but also to make it of equal value to the practitioner. The London *Lancet*, a very high authority, in speaking of the work, says: "Those who read the first edition of this work will bear us out in thinking that Dr. Meadow's Manual forms one of the most convenient, practical and concise books yet published on this subject. We can cordially recommend this manual as accurate and practical, and as containing in a small compass a large amount of the kind of information suitable alike to the student and practitioner."

From our examination of the work we can unhesitatingly indorse what is stated of it by the *Lancet*. Representing the subject as it does in as concise and convenient form as is practicable, the student of medicine especially will find it of great value. While verbiage is avoided and the discussion of subjects is omitted, which are of no practical value, yet nothing is left out essential to the knowledge of the student.

The First Part is taken up with an account of the physiology of *Conception and Gestation with the Development of the Ovary*, together with the *coincident changes occurring in the uterus*. The Second Part embraces the whole subject of *Pregnancy*, its *Signs and Symptoms*, its *Duration*, and the various deviations from what may be called normal pregnancy, both as regards the embryo itself and the organ containing it. The Third Part considers *Natural Parturition*, the *Classifications of Labors*, the *Phenomena and Management of Natural Labor*. The Fourth Part brings under review the various *Obstetric Operations* which are not required in Natural labor, but which are necessitated by the different emergencies described and illustrated in Parts v. and vi. under the heads of *Unnatural and Complex Labor*. Lastly, some of the principal Diseases of the Puerperal State are described in Part vii. These are treated in such a manner as to impress upon the mind of the student the leading characteristics which should awaken attention at the bedside.

HANDY-BOOK OF THE TREATMENT OF WOMEN'S AND CHILDREN'S DISEASES, according to the Vienna Medical School, with prescriptions. By Dr. EMIL DILLERBERGER. Translated from the second German edition, by PATRICK NICOL, M. B. Philadelphia: Lindsay & Blakiston. Cincinnati: G. E. Stevens & Co. 12mo. pp. 244.

This little work on the diseases incident to women and children will be esteemed by many practitioners as valuable as a book of reference. Each disease is treated of in a concise manner—the leading information in regard to it being given—and then follows an outline of treatment according to the Vienna school of medicine, with prescriptions. As the treatment of the Vienna school differs materially, in many cases,

from that of the English, the work can be consulted with no little interest for suggestions that are not to be found in English books, and we have no doubt it will be sought for on that account. The more extended are our observations, the better prepared will we be to combat with disease, and therefore should we seek for facts in every quarter that is made open to us. The Germans are noted for their profound researches and acute observations, and their works can be studied with great advantage.

Editorial.

We regret to say that quite a number of our subscribers have not as yet paid up for 1871, while a number are in arrears for 1870. We hope this little piece of information will result in our being able to return the money we have taken from our private resources to pay the printer. To be served monthly with the very best medical literature of the day, and not to promptly pay the trifling sum of \$1.50 a-year for it, but to compel some one else to pay for it, it seems to us is falling short of duty. It is certainly a violation of the golden rule—doing ~~one~~ one would be done by. Now, gentlemen, remit, and it will be all right.

CHOLERA.—From all information we can gain it seems very probable, at no distant period, we will have a visitation of that most terrible of all diseases—cholera. It appears to be on its westward course. From accounts it is prevailing in Königsburg, and other towns of Germany. A case or so is said to have occurred in London, England, and produced very considerable excitement there. We also saw it reported in the newspapers a few days ago that a patient had died of it in Bellevue Hospital, New York; and they have taken steps for the establishment of a quarantine at that port.

We think it would be a wise measure on the part of the European nations for self-protection to take some action looking to the enforcement of some sort of sanitary means upon those densely populated Asiatic countries in

which cholera originates. The fell disease has swept over Europe and America, destroying its thousands upon thousands of lives, and inflicting untold miseries; and if it could be checked at its source, it would be the greatest boon that ever happened the human race. The discovery of vaccination has been regarded truly a great boon, but how much more so would be the eradication of the cause of cholera. Nations expend millions of money in making war upon one another for very slight causes. A fancied insult to one's honor seems sufficient sometimes to wage a war almost to extermination with all its horrors; and not unfrequently for the promotion of commerce is it regarded justifiable to interfere with the established customs of a people. Since, then, these things are so, would it not be in accordance with right, and policy to make use of forcible means, if necessary, to enforce sanitary measures upon an ignorant and barbarous people, whose customs sometimes almost threaten the extermination of the civilized world?

It is well known that the habits of the ignorant and barbarous Asiatics are of the most filthy kind, and that they indulge in vices of the most disgusting character. Besides, these people, thus filthy and vicious, are accustomed to come together in crowds of thousands on their pilgrimages and on other occasions, and the result is, a poison of the most malignant character is generated, which, taking a westward course in the channels of trade, sweeps over Europe and

America before it has spent its force. How enduring and virulent is the poison is seen from the fact that in its passage across the broad Atlantic it scarcely suffers any diminution of its power.

It is not probable that several nations whose people have always been of filthy habits could be made neat and tidy by any means that other nations could bring to bear, but it seems to us that certain customs which generate a malignant crowd-poison might be overthrown, which, being done away with, would break the necessary chain of conditions upon which the formation of the poison is dependent. A number of times the plague or cholera has resulted from pilgrimages of vast numbers of people collected together without leaders and without being properly supplied with the necessities of life. In fact, we believe that nearly every plague which has made its frightful visitation can be traced to the crowding together of vast concourses of people of a particular class. Now, if this crowding together is an essential condition for the generation of the specific poison, it certainly would not be an impossible thing for the European powers to put a stop to it. The present epidemic seems to have occurred from the people of Persia, in a starving condition on account of the famine, crowding into the towns and cemeteries; the famine having been brought about by the most atrocious acts of tyranny on the part of the Persian government.

It is to be deplored that we are as helpless in the treatment of cholera as ever we were, science not having made a single step of progress in that direction. Indeed it can be urged with no little plausibility that the disease has as yet never been amenable to treatment, for the most diverse has seemed to have had equal success. From the facts before us there is no little reason to believe that all cases of recovery have been due, not to the medicines administered, but to the powers of life being able to hold out until the poison had

exhausted itself, and that the recovery would have occurred as well without treatment as with it. Heretofore medication has been employed as if the disease consisted in some abdominal irritation, and not as if the phenomena witnessed were but manifestations of a power beyond them. Surely there is as much reason to regard the exudation in diphtheria, the disease, as to presume, the vomiting and purging in cholera is the real disorder. In fact, it is not improbable they are means of elimination, where they exist, of nature, and if they could be controlled, that it would be a cause of fatal termination, when recovery otherwise would take place. That they are not the disease is proven by the fact that they do not invariably exist, and very seldom can death be ascribed to the loss of fluids.

We do not believe that any treatment of cholera will be of any avail until the nature of its cause is demonstrated, and then we will have to antidote it as we antidote any of the common poisons; for that it is a poison acting upon the blood and nervous system there can be but little doubt. If we can as yet do nothing in curing the disease when it has seized upon its victim, we can no doubt do much in warding it off—in keeping it away from our cities, towns and villages. Knowing that it originates in the filthy habits and other unhealthy conditions of large numbers of persons massed together, it is certain that a like condition will form for it a nidus for further development and increase. It should be the duty, therefore, of boards of health and other authorities to enforce the most stringent sanitary regulations. It is true that in cities all classes not unfrequently suffer alike without regard to habits, but that fact does not disprove that cleanliness is a prophylactic of the disease, since in cities the poison having found a lodgment, the necessarily close contact and association to some extent of the inhabitants are such to make it impossible to entirely prevent

its dissemination among all classes. Strict sanitary regulations certainly will hinder further development of the poison if it does not destroy that which has been already generated; and as the tendency of the poison is to exhaust itself, if no new nidus is found by it, epidemics will be greatly shortened and rendered less virulent by due attention to hygienic conditions.

IN MEMORIAM.—Dr. G. C. Blackman, at his decease, not having left adequate provision for his family, it is proposed to raise a memorial fund for the purpose. The project is a very worthy one, and it is hoped that Dr. B.'s many friends and admirers will liberally respond with contributions. Drs. M. B. Wright, E. B. Stevens, and W. W. Dawson, are acting as a committee.

THE FEMALE STUDENTS AT EDINBURGH.—The female aspirants for medical honors appear to be as irrepresible at Edinburgh as here. Led on by that redoubtable lady with the unharmonious name, Miss Jex Blake, they have again been knocking at the door of the University and demanding further privileges. It appears, according to the *Lancet*, that some of the professors are not prepared to deliver second courses of lectures for the ladies benefit, while the University regulations do not admit of the ladies attending more than four classes at the extra-academical school. Miss Jex Blake accordingly suggests that the Senatus might appoint special lecturers in cases where the ordinary lecturer declines to give a second course, and that the expenses of such appointment should be defrayed by the ladies themselves, or, failing that arrangement, that the extra-academical course should be allowed to qualify for graduation beyond the four classes already allowed for that purpose by the University. As the *Lancet* admits, the proposal seems quite a reasonable one, and if the Senatus should reject it, that body will certainly be in the scarcely consistent position of having first allowed Miss Jex Blake

and her sisterhood to matriculate as cives of the University, to enrol themselves as students, to prosecute their studies with a view to graduation, and then having turned round and barred their progress half-way.

Apropos of the above, the English medical journals for July 22 announce that on July 18 the Lecturers at Surgeons' Hall, Edinburgh, resolved, by a majority to rescind the resolution adopted last year, permitting lectures to be delivered to female as well as male students. The lecturers are therefore prohibited from giving instruction to female students. — *Medical Times*.

MYSTERY SOLVED.—Many of our readers will remember the young woman afflicted by the companionship of a snake, which played bo-peep from her throat. Although "plainly seen" by several of our physicians, who lay in wait for the reptile, forceps in hand, it always escaped capture. The following slip, taken from the *Tribune*, solves the mystery, and at the same time suggests a new anthelmintic, which, we feel assured, will always expel such parasites:

"Annie Brown for years excited rural communities by exhibiting an unusual cause of affliction, and has been given over by many doctors as one beyond cure. She has apparently been troubled with a snake which, at intervals, thrust its head out of her mouth and instantly retreated down her throat. A suspicious physician in Wayne County Infirmary prepared for sharp work the other morning, and, when the snake appeared, seized the poor woman by the neck, so that the reptile might not retreat. Lo, when disgorged, nothing more formidable than an india-rubber imitation of a snake came forth, and now Annie's occupation is gone." — *Medical Times*.

THE CLINIC.—This is the title of a weekly medical journal, published and edited by a number of the faculty of the Medical College of Ohio. The last number received contained sixteen pages, four of

which are devoted to advertisements. It presents a neat appearance, and we hope it will have all the success its sanguine projectors anticipate. Some invidious persons may say, "Why a new journal?" "*Cui bono?*" But such queries are impertinent. We hold that every individual who wants to have an inalienable right to start and "run" a medical journal, and spend his money freely in the enterprise; and is accountable for so doing to no one. Our brethren of the Ohio College should have free play. A number of them are profuse writers, and we guarantee that the pages of their neat little journal will not lack for communications. In the last number the "Buffenbarger Case," which has been a source of great anxiety to our mind as well as to the minds of scores of other medical gentlemen, has been definitely settled. Prof. Whittaker in a very long article by his researches of the works of Nothnagel's *Handbuch der Arznei-mittellehre*, Berlin, 1871. Orfila's *Toxicologie*, Tome 1, re Paris, Fodere's *Trate de Medicine Legale*, Tome iv. 1813, Paris, and some fifteen or twenty other foreign and domestic writers establishes beyond controversy that the arsenic might have been introduced into the body previous to death or it might not have been --that there is much evidence showing that it was not, while there is a great deal to prove that it was. He establishes clearly that the symptoms of consumption previous to Mr. Buffenbarger's death indicate that arsenical poisoning was not the cause of death, but at the same time points out the fact that slow poisoning by arsenic will produce symptoms so similar to those of consumption as to deceive the unwary.*

A number of other articles, of great practical interest to the every day practitioner, appear in the two numbers alluded to, which we have not time now to mention, much less to give an outline of. If our

* Since writing the above the lucidness of the article has been the subject of an editorial in the *Gazette*.

readers wish to know what they are, they must subscribe for the *Clinic*, which is issued at the low price of \$2 a-year in advance. Address, Prof. James T. Whittaker.

PROF. T. A. REANY.—This gentleman, recently of Zanesville, now of this city, has been appointed Prof. of Obstetrics in the Med. College of Ohio. For several years Prof. R. filled the chair of Dis. of Women and Children in Starling Med. College, and was highly esteemed as an instructor.

We desire to call the attention of our readers to the advertisement of Kent & Michie on the second page of cover. These gentlemen always keep on hand a fine assortment of goods in their line, which they sell at prices entirely satisfactory to purchasers. Watches, clocks, silver and plated ware, spectacles, magneto-electrical machines, microscopes, etc. are always on hand in large quantities to select from, and at various prices. Repairing also is carefully done and warranted. We hope our friends will give them a call, and we think they will become permanent customers.

A LIVE HOME JOURNAL.—NOTABLE CHANGE. -- Last October, *Hearth and Home* passed into the hands of Messrs. ORANGE JUDD & Co., of 245 Broadway, New York, the well known publisher of the *American Agriculturist*—a journal long without a rival in sterling value and circulation. The marked improvements then expected to appear in *Hearth and Home* have been fully realized, and it is now one of the choicest illustrated journals anywhere issued for the family circle—adapted to both the juvenile and adult people, and meeting the special wants of the housekeeper. Besides it supplies very useful chapters for the garden and farm, and an important news sheet, giving a valuable resume of the news for a week, up to the moment of issue. From \$500 to \$800 worth of very fine engravings beautify each weekly number. Terms only \$3 a year.

THE CINCINNATI MEDICAL REPERTORY.

VOL. IV.

CINCINNATI, OCTOBER, 1871.

No. 10

SUPRA-PUBIC PUNCTURE OF THE URINARY BLADDER BY A SAILOR WHILE AT SEA.

Reported by S. SEARON, M. D., New York.

The following case was brought to my notice by Capt. Isaac Coombs, of the Bark *Anna Walsh*, now in this port.

At my request Capt. Coombs sent the hero of the operation to my office, and the statement is almost in his own words. He is a very intelligent Scotchman.

B. R. M. is mate of the *Anna Walsh*, and states that she left Newport, Wales, for New York, June 8th, 1871.

At the time of sailing M. was using a catheter for an old urethral stricture.

On the 15th of June he experienced some difficulty in introducing the catheter and used more force than usual. The urine, which had previously been dribbling away, now ceased to flow. This was in the morning. About four o'clock, P. M., the pain became very severe, and the bladder painfully distended.

He now resorted to hot baths, and again attempted in vain to introduce a catheter, this time a smaller one.

He describes the agony as being intense. Injections per rectum of a strong decoction of tobacco were now tried. They made him very sick, but gave no relief to the stricture. He also took of the muriated tr. of iron ten drops every twenty minutes, as well as several teaspoonful doses of sweet spirits of nitre and some laudanum.

At eight o'clock, P. M., he told Captain Coombs he would have to cut into the bladder. To accomplish this, the Captain's pen-knife was brought into requisition. The blade used was a

small one, about two inches in length and round at the point; it was sharpened by one of the sailors.

While standing, M. seized the knife and plunged it into his bladder just above the pubic symphysis; the blade was held transversely and pointed somewhat downward. The opening was then enlarged by moving the point of the blade from side to side several times. The blade had been driven in as far as it would go.

Upon withdrawing the blade there was an escape of urine and blood, producing great relief. M. was now placed upon the bed much exhausted from the suffering and excitement, as well as from the sedatives and narcotics taken during the day.

The Captain now attempted to introduce a German silver catheter into the bladder through the wound, but owing to the changed position of the sufferer was unable to do so. He then used a thumb-lancet and passed it into the wound as far as the blade and handles would go, working the point about from side to side. After withdrawing the lancet he succeeded in passing the catheter into the bladder.

M. now slept for several hours, and on waking found several blankets much saturated with urine which had flowed out through the catheter.

After wearing the catheter in the opening for two or three days the urine gradually began to pass through the urethra.

On the fourth day suppuration was established and was very free, about eight ounces discharging daily. This continued for about ten days, during which time warm bread poultices were kept on the wound, and changed three or four times daily. Feeling much better he got up, but was soon compelled to return to his bed. The suppuration was again very free. At the end of 28 days he was well. There was an indurated circle around the wound about three inches in diameter, which gradually disappeared.

To day (Aug. 21st, 1871), he is in very good health; the cicatrix looks well, a very little tenderness on pressure over the tract of the wound.

I trust no apology is needed for reporting this interesting case. Although M. selected the least favorable method of the four for puncturing the urinary bladder for retention of urine, yet it was

probably the easiest for him to perform upon himself. Prof. Gross states that he has never performed this operation but twice, and neither time upon his own patient.

GALL-STONES,--WITH REMARKS UPON THEM.

Lecture before the Dissecting Class of the Cincinnati College of Medicine and Surgery. By M. L. AMICK, M. D., Demonstrator of Anatomy.

GENTLEMEN—I have just removed from the subject before us this gall-bladder, which you see is distended with gall-stones.

As to the nativity, life and death of this man, we know nothing, but from his appearance we should judge him to have been a strong, muscular man; weight, over two hundred; age, over forty; and from his hands, a laborer.

Having fully described and demonstrated to you the situation, size, structure, use and consistency of the gall-bladder, we will now open this specimen and examine its contents. The walls of this gall-bladder are very thin, and are, as you see, considerably stretched by the contents. We make an opening into the bladder, and we succeed in pressing out nearly a drachm of dark yellow gritty bile.

We now enlarge the opening, and expose to view a magnificent sight of gall-stones, ranging in size from a millet seed to a small walnut.

We take them out and wash them, and find that we have one hundred and sixty-eight (168) gall-stones, all larger than a pea, and seven of this number are very large, being about half an inch in diameter. We weigh them and find that their weight is four hundred and sixty grains. We weigh the seven large ones, and find that they weigh two hundred and fifteen grains. They sink when I drop them in water. We now wash the bladder and find that in the bottom of the bowl we have several hundred very small stones that resemble small grains of brown sand, presenting a glistening appearance as if studded with minute diamonds.

I have in this bottle a gall-bladder that I removed from a young lady several months ago, which I will now open, and, as you see, we derive by measurement two and one-half drachms of thick sandy bile, and extract thirty-six gall-stones that are of a

dark color. Their weight is only one hundred and forty-five grains. The largest one in this number weighs forty-five grains, and measures about three-fourths of an inch in diameter. I drop these in water and they float.

I have examined a number of gall-bladders that contained from one to four gall-stones, but the specimens before us are very valuable, as well as rare, and are well worthy of study and consideration.

Some writers mention that as many as three thousand have been counted in a single bladder; yet, from their small size, they may not have weighed half as much as the one hundred and sixty-eight we have just removed.

Where only one or two exist they often attain considerable size; still you scarcely ever will see one as large as this one, (the largest of the thirty-six removed from the gall-bladder of the female.)

It is remarkable to see with what regularity the smaller stones are formed, nearly all being regular tetrahedrons. The seven large ones are very irregular in their form, but their angles are very exact, and if there was one more large one they would pass for large metacarpal bones. But the most striking and impressive attraction is their color. As I turn them they sparkle with scales of cholesterine, though the greater portion of their color is a beautiful golden yellow, except on the dark side. Yet we can see white, black, brown, green and blue, while some appear to be studded with sets not unlike copper ore. The beauty and reflection of this one would make a striking adornment for a costly ring. The different colors of the bile has given to them this beautiful concentric laminæ, that we see arranged so even and delicate, presenting a finer hue than the artist's pencil could portray, or the sculptor's chisel engrave.

We place them under the microscope and find that the cholesterine crystallization is finely displayed with some mucous and pigment scattered slightly through it.

The gall stones that are found in the human gall bladder, are composed mostly of cholesterine, with a small quantity of coloring matter. In these we have the crystals of cholesterine, some mucus and black pigment in the shape of little nodules. The study of the formation of gall stones comes more properly under the domain of physiology than anatomy, still it might be well

for you to notice that their first formation must either take place in the hepatic ducts of the liver, or within the gall-bladder itself.

If in inflammation of the hepatic ducts, a duct becomes closed, an accumulation of bile takes place beyond the constrictions, and becomes stagnant; in this condition a portion of the water of the bile is removed by absorption, and the bile is inspissated, and some of its constituents are precipitated in the shape of dark colored granules, which are heavier than the bile. When the inflammation subsides and the constriction is removed, these dark colored granules are carried into the gall bladder, where, from their weight, they gravitate to the bottom of the gall bladder, where they remain and receive additions until they present the various appearances and sizes here displayed. They may form in the gall-bladder when stagnation of the bile occurs from a narrowing of the cystic or the common duct, especially when lithic acid is present.

Gall stones are often discharged through the cystic and common duct, into the duodenum, causing severe pains and vomiting or producing slight colic and tenesmus. If the stone be so large as to lodge in the cystic duct it prevents the ingress and egress of the bile into the gall-bladder. They seldom lodge in the common duct. Abercrombie relates an instance of death from a gall-stone passing through the common duct. When very large they may obstruct the bowel, and cause constipation, or even fatal ileus.* I once found a small gall-stone lodged in the vermiform appendix.

Though the immediate cause of their formation is probably due to the deposit of some of the principles of the bile in solid form, yet we have no constitutional symptoms that lead us to detect their formation. Persons who have suffered from the passing of gall-stones are liable to suffer in the same way again; and Morgagni remarks that urinary calculus and gall-stones are often caused by the same conditions. My own observations lead me to believe that a hereditary tendency undoubtedly accompanies their formation—having known where father and children all suffered alike and died with similar affection, and when a post mortem was obtained it revealed gall stones, and plainly demonstrated that all the family must have had gall-stones, as all died from a similar affection. Sedentary habits seem to exert a ten-

* Abercrombie, (2nd. ed. p. 133). M. Faneconneau Dufresne, Vol. I. *Revue Medical*, (1841.)

dency that disposes to their formation, and hence the greater liability of women to gall-stones. Literary men, prisoners and persons of great mental anxiety or trouble offer conditions peculiar to their formation. Fat persons, as the one was from whence these were taken, and people who drink water, rich with lime, are seemingly, from statistics, most liable to their formation.

ATROPHY OF THE GASTRIC TUBULES.

By Dr. J. T. DAVIS, Laconia, Indiana.

Several excellent works on the various diseases of the stomach have appeared during the last ten or fifteen years, by Budd, Brinton, Handfield Jones, Chambers, Habershon, Pavy and others.

The profession gratefully acknowledge their indebtedness to the illustrious and hard working physicians above named for the clear knowledge they have placed before them in regard to the stomach and its diseases; but laborious and brilliant as their labors have been, it is evident that a great deal yet remains to be done in order to thoroughly understand and properly treat the various troubles we find in the stomach.

The disease given in the heading of this article is one that has received but little attention; but few authors mention it at all. The first account of it I think was given by Dr. Handfield Jones in 1854. It seems, however, that but very little attention was directed to this affection with definiteness of purpose until Dr. Samuel Fenwick, Ass't. Physician to the London Hospital, investigated the subject, and demonstrated, by post mortem examination, the real nature of the disease. Prof. Austin Flint, M. D., of Bellevue Hospital Medical College, in an article in the January (1871) number of the American Practitioner, gives his opinion of the disease, and states that in a lecture delivered by him at the Long Island College Hospital, in 1860, he used the following language: "*I have not the presumption to offer an explanation of these cases; but I have an idea, which I do not hesitate to throw out because I can do no more, and I give it only for what it is worth. To follow it out by researches, which will show it to be valuable or worthless, will probably not be within my power. I suspect that in these cases there exists degenerative disease of the glandular tubules of the stomach.*" 1

am led to this suspicion somewhat as a physician is said once to have arrived at the conclusion that the pancreas must be diseased, by convincing himself that all the other organs in the body were sound, and this was the only organ which he could not satisfactorily interrogate. Here is, at all events, a field of research which has as yet been hardly more than explored." Further on he says, "*I shall be ready to claim the merit of this idea when the difficult and laborious researches of some one have shown it to be correct.*" In the March 18th number of the Medical and Surgical Reporter, 1871, Dr. Flint gives accounts of several cases of this disease occurring in his own practice and in the practice of Prof. Fordyce Barker and other eminent physicians of New York and Brooklyn. Dr. Fenwick gives the symptoms of a case as follows (I copy from London *Lancet*, reprint, October, 1870): "A gentleman about forty-five years of age consulted me in February last. He complained of great weakness and inability for mental or bodily exertion. Occasionally he had pain in his back, and a sensation of numbness in the legs; but there was no loss of feeling or appearance of paralysis. He was troubled with palpitation and breathlessness on exertion. He did not seem to be much emaciated; but his face was of the pale yellowish color so often seen in persons affected with malignant disease, and the lips, tongue and throat were exceedingly bloodless. He had neither cough nor expectoration; the appetite was very bad; he suffered from flatulence and occasionally from bilious vomitings, and the bowels were much confined. The pulse was exceedingly small and feeble. The complaint had come on so gradually that he could scarcely fix the exact time of its commencement; but he had been ailing for at least eighteen months. Previous to this date he had enjoyed good health: he had never suffered from any loss of blood, nor from ague or diarrhea. On careful examination no darkness of the skin could be discovered; no disease of the heart or lungs could be detected by auscultation and percussion; the liver and spleen were normal in size, shape and position; the thyroid and lymphatic glands were not enlarged; the stomach was not dilated, and no tumor could be found in any part of the body. The urine was clear, acid, and free from albumen and sugar. A drop of blood obtained from a prick of the finger, when examined by the microscope, showed no increase but rather a deficiency in the number of the white globules. I

prescribed steel and quinine with a small dose of cod-liver oil, and recommended a nutritious diet and a moderate allowance of wine; but," says the doctor, "he gradually became more feeble and anæmic; and on two or three occasions he seemed to be dying, but again rallied; at last, after slight attacks of delirium, he died apparently from exhaustion."

Post mortem examination showed the liver, spleen pancreas and super-renal capsules to be in a healthy condition; kidneys also normal; but of the stomach he says, "The whole of the glandular structure of the organ was in a state of atrophy; in no part could I succeed in procuring a section of normal tissue." Dr. Fenwick further says, "Cases of fatal anæmia like the foregoing have probably fallen under the observation of most practitioners. At any rate I can call to mind several in the course of my own experience." Now I will not dispute with Dr. Fenwick and say that he is not correct in his last remark, but one thing is very evident, that is, if such cases have been observed they have not been reported in the journals. Having had a case similar to Dr. Fenwick's I have felt deeply interested in it, and have sought for information in regard to it from every available source that I could command, and my object in writing this article and recording the following case is not to claim any originality of observation or success in treatment, in this disease, but simply to give my mite of experience, and to request my professional brethren to investigate this affection as thoroughly as possible by the aid of the microscope, etc. and to report the results of their investigations in the journals.

CASE.—W. D. æt. 23 years was taken sick about the first of March, 1871, with remittent fever, and treated in the ordinary manner. He soon recovered from the fever and appeared to be in a fair way to get up, but instead of increasing in strength, and appetite improving, it became poorer; he began to be troubled with vomiting, bowels confined; was restless and very nervous, and so weak that he could sit up very little; he had no fever, no cough; emaciated rapidly; he had had no trouble in his lungs or bronchial tubes in connection with the fever. An examination of his lungs showed them to be healthy; heart sound and normal; liver, spleen and kidney were all in a healthy condition. There was no tumor detected in the stomach, no symptoms of cancer, ulcer, or chronic gastritis. He never complained of pain in the

stomach; he complained of flatulence, but of no pain or tenderness either in stomach or bowels; he had numbness of the legs, and complained of shortness of breath in attempting to get up. Pulse small and weak, tongue pale, complexion slightly yellowish; he never had any headache. As I above stated, he was *very nervous*, he had several spells that were evidently of an hysterical nature; sometimes he would look wild and become greatly excited at the occurrence of the most trivial thing. In this connection I will here state that he had a brother who was an inmate of an insane hospital. I think that the wild spells he had were bordering upon the domain of insanity. I am aware that it is argued, that the effect of remittent fever is very injurious to the nervous system, but in this case the attack of fever was a mild one; there was no delirium or brain trouble at any time during the continuance of the attack of fever. I can see no reason to account for the constant wasting and exhaustion except by considering it a disease of the gastric tubules. He was treated with tonics, as iron and quinia, also bismuth, with wine and nutritious diet; he would improve apparently for a few days, and then lose all he had gained. He continued to grow worse, and died almost suddenly, May 14, 1871. No autopsy. We would have been very glad to have had the opportunity of examining the stomach, but could not do so.

A CASE OF RECURRENT SUPPRESSION OF THE URINE.

By DANIEL W. KISSAIN, M. D., Brooklyn, N. Y.

That total suppression of urine is fatal we all know, and know the cause of death to be in the uremic condition it induces; and we always feel that if any urine can be made to pass that the case is not necessarily fatal.

The recurrent suppression of urine is a very rare disease, and but few practitioners even of large practice have ever witnessed its occurrence, and but few of these rare cases have been examined post-mortem:

The microscopic appearances in the urine of the case I am about to relate showed intense congestion of the cortical part of the kidneys, for there were seen not only casts of the tubes proper, but of the malpighian bodies, with expansion of those

tubes, which is not common in the casts of the kidneys. The fact of the intermittent excretion of urine can hardly be accounted for. If we suppose the tubes so disorganized as to totally stop excreting at one time, why should they not be so disorganized, even if the obstruction passes, that they can not excrete at any time? But in the case here reported they did resume their functions.

Mrs. M. H——, æt. 82. Had been in good health, excepting a slight attack of intermittent fever, and had no evidences of any chronic kidney disease. Was of a very elastic constitution, though struma was shown in one of her daughters.

August 3d. She had slept in a draft, and made the remark that she had taken cold, but so slight was it that she had no misgivings of any trouble.

Aug. 6th. Had rigor, severe pain in lumbar region, followed with slight fever, which, with the pain, continued until the 11th of August, when excessive pain occurred deep in lumbar region, and the fever having passed away, the family gave her of McMunn's elix. opii. gtt. xxx, and sent for their physician, it being twelve m. and no urine having passed for twelve hours. No urine was found in the bladder. The skin was bathed in a cold sweat, and complete coma existed.

Aug. 12th, 6 A. M. Passed eight ounces urine, deep colored, contained bloody casts, a few showing the malpighian body cast full of blood globules; epithelial cells mixed with blood globules, and epithelial casts, and free epithelial cells, and strange to say there was not a trace of albumen. After this passage there was less coma than before—the coma diminishing about two hours after the passage of urine. At twelve o'clock, midnight, there was no urine in bladder, being eighteen hours after passage of water; but at 3 A. M., Aug. 13th, she passed probably about four ounces urine in the bed, and again followed a partial intelligence. The pulse was 84; respiration, 32; skin warm and moist; tongue moist and very little coated light brown in center; and has had three passages of feces in twenty-four hours. At 9 P. M. the pulse, 82; respiration, 34.

Aug. 14th, 9 A. M. Pulse, 85; weaker; respiration, 20 to 40; very laborious; lungs filling with mucus; no urine has been in bladder since Aug. 13th, at 3 A. M.; skin and extremities warm

and moist; head cool; eye just responds to the touch; tongue dry and falls back in the fauces; arms partially paralyzed.

Aug. 14th, 10 P. M. Pulse, 140; respiration, 42; passed a little very ammoniacal urine; skin of body cool; skin of arms, and legs and head warm; arms completely paralyzed; complete coma.

Aug. 15. Died, 3 A. M. No convulsions having occurred, and only a slight twitching of arms on Aug. 13.

The urine passed was on—

Aug. 10, at night,	quantity unknown
" 12, 6 A. M.	" 6 oz.
" 13, morning	" 4 "
" 14, 8 A. M.	" 2 to 3 oz.

In the last three passages of urine above mentioned there was no urine two hours before each passage in the bladder, and death evidently came from uremia.

RESEARCHES UPON THE LOSS OF SMELL.

By DR. NOTTA.

(Translated from the "ARCHIVES GENERALES" By Thomas C. Minor, M. D.)
Concluded from page 404, Sept. number.

But smell and taste were lost. At the end of six months these two senses recovered their integrity. (Observation reported by Rr. Hue, of Beaumont-le-Roger.)

OBSERVATION XV.—*Traumatic Anosmie; fracture of the skull. Incomplete establishment of the senses of smell and taste at the end of four months.*—L——, aged fifty-seven years, of a good constitution, placed himself under my care in September, 1869. Never was sick before. One year since he had a fall from a horse, and remained unconscious for fifteen hours afterwards. Can not state precisely whether there was any flow of blood from the ears, the eyes, or by the nose, however his face and head were stained with blood, and he had a paralysis of the right side of the face. Treated by leeches and purgatives he convalesced at the end of three weeks, but he had completely lost the senses of smell and of taste.

He remained in this state for four months. During the last eight months smell and taste have partially returned, they are

however much less developed than in the normal state. Nevertheless, to-day, he smells the odor of coffee, of garlic, and, in a word, all the strongest odors; as regards taste, he perceives only the very strongest savors; he has still the facial paralysis, and a feeling of giddiness when he lies down.

The observations of traumatic anosmie we shall divide into two classes: in the first, which includes only two cases, the anosmie was consecutive to a fall upon the head, without any fracture of the skull; in the second, which includes four observations, the anosmie came on after a fracture at the base of the skull, fractures characterized by a flow of blood or serosity by the ear, loss of hearing, facial paralysis, etc.

I will not hazard an explanation as to how the functions of the olfactory nerves are found to be paralyzed in these two classes of observations. Having had no occasion to make an autopsy, any explanation would be premature; I shall confine myself to determining the thing and describing the return of the function after three, four and six months of complete paralysis of the olfactory nerves. And, a strange thing, the anosmie that is developed after falls in appearance least grave (obs. 10th and 11th) have been positive, while those which have been consecutive to the most serious lesions have convalesced three times out of four. No one can ignore the fact that during the acute period of coryza the schneiderian membrane loses more or less the faculty of perceiving odors. But this anosmie is only transient; at the end of some days the sense of smell is restored in all its integrity. One had best, it is true, cite some case of loss of smell following violent coryza. But these cases are regarded as exceptional. They are it may be said not so rare as one might suppose; chance has permitted me to observe this functional alteration twice following a simple coryza, and three times following well characterized influenza.

OBSERVATION XVI.—*Anosmie following coryza; preservation of taste.*—M. M——, Secretary of the Mayor of Vimoutiers, aged fifty-nine years, sanguine temperament, had always enjoyed good health until about the age of fifty-five years, an epoch at which he experienced very acute sciatic pains which had, during the space of nearly six months, resisted all sorts of treatment, and of which he only got rid of two years since. Never had venereal disease. M. M—— has suffered from complete anosmie for at

least twelve years past. This infirmity declared itself in him following a violent coryza, or rather during the coryza. The nasal discharge, very abundant, was at first serous, later, pus more or less thick accumulated in the nares, as much on the one side as on the other; this discharge had no disagreeable odor. The coryza lasted several months; it has not recurred since; but afterwards smell was completely abolished. As regards the sense of taste it remains exactly as it was. He perceives all the savors, and distinguishes them perfectly. This observation so precise, which I owe to the kindness of my friend, Dr. Lesueur, (of Vimoutiers,) leaves no doubt as to the relation of the cause to the effect. The coryza must have been one of very great intensity and of very unusual persistency, as it lasted several months. It is to this last particularity that it is necessary to attribute the anosmie; we can not declare so with a single case, in as much as that in the following observation the loss of smell recognizes for a cause a coryza of great intensity, but of which the duration was ordinary.

OBSERVATION XVII.—*Anosmie following Coryza.* Mlle. L., of Moyaux, near Liseaux, aged 26 years, of habitual good health, very regular, had a very severe cold in the head following a chill. The coryza ran through its habitual phases, and, at the end of ten days, the nasal discharge ceased, she then perceived the sense of smell to be completely lost, and the sense of taste notably altered. At the end of fifteen days, experiencing no change, she came to consult me, very much frightened by the persistence of these symptoms. I determined (10th of February, 1869) that smell was abolished, and that the taste no longer perceived savors, with the exception of sugar, salt, etc., etc.; the nares are normal and permit the free passage of air. I prescribed veratrine, 10 centigrammes, sugar 10 grammes, three or four doses a day. March 12th. No amelioration, we cease all medication. At the end of December, I arrived at the conclusion that the anosmie and alteration of taste will always persist.

As we said at the commencement of this article, if in the majority of cases the patients do not consult us for loss or diminution of smell, they do so when they are acutely affected, and the latter patient was one of this sort: so we have been truly happy, even in the presence of our unsuccessful medication, of being able to reassure them by saying that this affection did not pre-

sent any danger, and that we have in our possession observations in which the sense of smell was re-established after a very long lapse of time; better, then, that we had not employed any active medication.

OBSERVATION XVIII.—*Anosmie following the Influenza.* Mme. de B.—, aged 72 years, of a sanguine temperament, nervous, but always enjoying good health, was attacked with influenza, which lasted five weeks. She had severe coryza, with swelling of the eyes and face, violent cephalgia, more violent than in previous cold in the head, and was obliged to keep her bed for some days. This coryza was accompanied by a very abundant secretion. During the five or six first days of attack, smell was preserved, but afterwards she lost it completely, and, with it, the greater part of the sense of taste: so that she no longer perceives the aroma of meats and drinks; she has only the notion of salt, of sugar, of bitterness and acidity. On inspection the nares present nothing in particular; the nasal secretion is neither more nor less abundant than before. Mme. de B.—, is to day, the 13th of July, 1861, completely cured of her influenza; at least all she complains of is a slight cephalgia, and, aside from the loss of taste and odor, her health is excellent. I prescribed—

Veratrine	0 gr. 05 cent.	
Sugar ..	1 " 00 "	
Powd. Iris.....	5 " 00 "	Mix

Inhale two or three doses every day. At the end of a month. the patient not having obtained any amelioration, I determined to do nothing more.

Seven months after, the taste and smell recovered little by little their integrity, and these two senses have altogether as much delicacy as before, to day, January, 1870. Mme. de B.—, aged 80, has had no relapse, she attributes her cure to this fact that, every day, during the seven months she was deprived of her sense of odor, she inhaled, every morning, for the space of ten minutes, the vapor from a bowl of hot milk.

The influenza was, as it always is, accompanied by very intense coryza, and the anosmie was a consequence of it. The re-establishment of this sense cannot be attributed to the treatment employed, but only to the forces of nature; for I cannot believe that the vapors of hot milk, continued as they were with so great a preservance, contributed at all to the cure. This abolition of

a sense during so long a time (seven months), followed by its complete establishment, which ceased not during the following years, is a most curious phenomenon of pathological physiology. I have already had occasion to cite it in several of my preceding observations, but the abolition of the function had not been of such long duration.

OBSERVATION XIX.—*Anosmie following Influenza*.—Mlle. D—, aged 72 years, of a good constitution. Has never had any grave disease; of a nervous temperament, subject to gastralgias, was attacked in the month of March, 1869, with a very severe influenza, well marked; headache, coryza, loss of taste and of smell, bronchitis, pharyngitis, accompanied by derangement of the stomach, and fever. This condition lasted a month, then Mlle. D— convalesced completely, but was greatly surprised to find she had lost the senses of smell and taste. It was about three weeks after her convalescence that smell returned little by little without the aid of any treatment. At the same time she recovered her taste, and since then these two senses are perfect.

From an etiological point of view, this case is identical with the preceding; the only difference is in the length of time the sense of smell was lost. In the place of seven months, it lasted here only three weeks, from the start of the convalescence of the patient. In these two observations, the general affection, the influenza, amounted to nothing in the production of anosmie; it was evidently the catarrhal inflammation of the nasal mucous membrane which determined the paralysis of the olfactory nerves.

OBSERVATION XX.—*Anosmie following Influenza*. (Observation of Dr. Lesuer, of Vimontiers.)—Mme. H—, of lymphatic temperament, aged 53 years. It is three years since, following a most painful moral emotion (her son having been found drowned), she ceased to be regular. One year afterwards, she had a cold in the head, which lasted a whole year with alternations in the abundance of the serous flow from the two nares. During this time, nothing particular in regard to the sense of smell had been noticed. It is two years since Mme. H— experienced an influenza so intense that she was obliged to keep her bed for fifteen days; it is at this epoch that she thinks she lost the sense of smell; she recovered from her influenza, and her coryza disappeared, since then she has not perceived any odor, however penetrating it might be, but her sense of taste has remained per-

fectly intact. She perceives altogether as well as formerly the savors of substances bitter and acid, and distinguishes at the same time the special taste of each one of them. With that exception, she enjoys good health, and is no more predisposed than in former times to having colds.

Here, we have a coryza which lasted a whole year without altering the sense of olfaction; but following a very intense influenza, which, when terminated, brought about the loss of smell. This case evidently belongs in the same category as the two preceding. I have seen anosmie manifest itself immediately after a single coryza, more or less intense, more or less prolonged. In the observations which follow, the relation of cause to effect is less precise, and the loss of smell appears to be produced little by little following repeated colds in the head.

OBSERVATION XXI.—*Repeated coryzas; anosmie; preservation of taste.*—Mme. B—, aged forty-four years, of a good constitution. was a cook in earlier life, and had therefore the taste and smell very much developed. She was very subject to colds in the head. It is about fourteen years ago, without any other appreciable cause she perceived that she noticed less and less disagreeable odors; then it ended in her smelling nothing at all, and in this condition she has been for twelve or thirteen years back very nearly as to-day.

She no longer smells the fragrance of flowers, no longer is conscious of the odor of the night cart or of privies, she perceives not the emanation from soap-grease factories, nor the smell of burnt leather; in the meanwhile, at times, but very rarely, she notices the odor from browning coffee. As to taste, although a little diminished since the loss of smell, it is preserved; as to the smell she can not distinguish one sort of cheese from another; but on eating it does not hesitate an instant. If she puts her nose close to a cup of coffee she does not perceive the odor, but in swallowing it she recognizes the taste. Salt, sugar and bitterness are noticed as in the normal state; but as to savors, although she habitually distinguishes them perfectly, there are moments when the sensation is less distinct, without her knowing why. Since she has lost the sense of smell she is much less subject to colds in the head than formerly.

The slow progressive march of the paralysis of the olfactory nerves would at best, it is true, indicate an atrophy of the nerves

of the first pair, but the age of the patient would make one think such is not here the cause of the anosmie, but that it is better to attribute it rather to the numerous coryzas by which the patient had been attacked in her youth. May be some of the nervous filaments of the deeper and more remote folds of the nasal mucous membrane have been spared? Is it to this therefore that is due the explanation of the momentary and fugitive return of the sensation of certain odors, and the persistence of taste? Whatever it may be, this persistence of taste was found in other observations with a complete anosmie.

OBSERVATIONS XXII.—Repeated coryzas; anosmie; polypus of the nose.—Mme. Def—, aged about thirty-three years, nervous constitution, very subject to colds in the head, lost her sense of smell without any other appreciable cause, about six months since. She remarked that the taste or rather the sensation of savors was at the same time abolished. Three years ago she experienced difficulty in respiration, and her physician, only two years ago, determined the existence of a mucous polypus in the nose, and on removing it with forceps the respiration became more free; but the polypus was reproduced, and Mme. Def— came to consult me in the month of September, 1869. The air did not pass by the nares, and there was in consequence a very great obstruction to respiration, to such a degree that in the night Mme. Def—was often obliged to assume a sitting position in order to breathe. Smell was completely abolished, taste also. I performed the extraction of the polypus. Since the operation respiration has become perfectly free; but smell has only made its reappearance in a very imperfect manner. Certain strong odors are perceived; camphor, for example; but she does not smell the odor of the rose or mignonette. Taste is also very obtuse.

In this observation the loss of smell was anterior to the obstruction of respiration, and consequently to the appearance of the polypus. I have fully established this fact; and it is very evident that it is necessary to attribute to the frequently repeated coryzas to which the patient was subject, this anosmie which, as it preceded the polypus, persisted after its ablation.

The loss of smell can exist as well when the olfactory nerves preserve all their sensibility; this has been observed in certain cases of ablation of the nose. The function is destroyed, but it

is re-established by the application of an artificial nose. Is it the too immediate action of the air upon the olfactory mucous membrane which dries it and prevents the perception of odors? This is probable. Whatever it may be, the opposite deficiency produces the same effect, and the narrowing of the nares, if it does not produce complete anosmie, singularly diminishes the perfection of smell. It is the same with a polypus, which, after it has obliterated more or less completely the nasal fossa, brings about diminution, and often at the same time, the complete loss of olfaction. The following are examples:

OBSERVATION XXIII.—*Mucous polypus of the nose; anosmie; preservation of taste.*—Dionis, aged nineteen years, farmer, has mucous polypus in both nostrils, and for eight months past they are completely obliterated. For the same lapse of time he has entirely lost the sense of smell, but taste is preserved. He distinguishes the different savors of foods. I operated in September and October, 1868. Since that epoch smell has returned and is very sensible. To-day, the 25th of September, 1869, there has been no repetition of the trouble.

I owe to Dr. Giboin the following case which he observed in his practice.

OBSERVATION XXIV.—M. J——, had for fifteen years past, in each nostril a mucous polypus which obliterated the passages completely, and, for fifteen years past, he had lost the sense of smell and the sensation of savors. He allowed himself to be operated on, extraction of the polypus was performed, and the senses of smell and taste once more re-appeared.

In the preceding observations as soon as ablation of the polypus gives the air an easy access the function re-establishes itself, even when it has been abolished for a very long time.

If we sum up the principal points of this memoir, and the ideas which are furnished us by the observations that it contains, we see that the most different causes may produce anosmie.

It may be congenital and due to the absence of the olfactory nerves.

In certain cases it is only a symptom of a more grave affection, of which the proximity has brought about the destruction, the compression or the alteration of the nerves of the first pair (cerebral tumor, exostosis, caries of the frontal, etc.)

It may be in consequence of an atrophy of these same nerves.

In other cases, or where it constitutes by itself alone all the disease, we have proposed to call it essential, because it comes about without any appreciable cause.

We have seen it manifest itself following falls upon the head, complicated or not with fracture of the skull, and we have termed it traumatic.

We have seen it occur, sometimes following coryza, either more or less prolonged, or complicated with influenza, sometimes following repeated coryzas.

Finally, in order to be as complete as possible, we have described the causes that I will call external, because they are independent of the state of the olfactory nerves, and that, in spite of the integrity of the latter, they may bring about a more or less complete loss of smell, such are—absence of the nose, contractions of the nasal fossa, polypus of the nose.

Loss of smell manifests itself in a different manner following the cause that produces it. Sometimes, as in atrophy of the olfactory nerves, or following repeated coryzas, it appears little by little, slowly, taking several years to be produced, sometimes as at the end of a traumatism, or as in the observation of Graves, it manifests itself suddenly; at times, as after coryza, the anosmie is only a permanent infirmity, causing afterwards an habitual passing state.

Physiologists teach us that certain gustatory properties of bodies may be perceived independently of the sense of smell; such are sugar, salt, acid, sweetness, bitterness and others. On the contrary, others require the complete integrity of smell; such are the savors, the aroma of foods and drinks; and we know the very simple experiment, which consists in tasting different meats or different wines, after closing the eyes and stopping the nose, an experiment by the aid of which it is easy to verify the accuracy of these physiological notions. If the majority of our observations confirm these ideas, there are some, and they are more numerous than a person would believe, which are exceptions to this rule, and in which the sensation of savors has been preserved, when smell was completely abolished. Already we find the fact described in an observation of Schneider reported in the thesis of Pressat, p. 17.

“Eustache Rhudius, it is said, knew a young man who, deprived of the sense of smell, from the time of his birth, had a *perfect*

taste. Now, as well as this expression of perfect taste may be very significant, as the author of the observation does not enter into other details, and when we may suppose that he has not made analysis of the different gustatory sensations of his subject, we cannot enter this case among those reckoned on. In observations 10, 16, 21, 23, we cannot address a reasonable objection; the different patients have been interrogated with care, and we have been able to convince ourselves in a positive manner that taste had all its integrity, and that the sensation of aroma, of savors, was well preserved, when smell was abolished.

Now, this peculiarity has been observed under the most diverse circumstances. In observation 10, the anosmie recognized had for a cause the fall upon the head. In observation 16 it was consecutive to a coryza complicated with influenza; in observation 21, it manifested itself following repeated coryzas; finally, in observation 23, it was due to a polypus of the nasal fossa. I will not seek to explain this physiological anomaly, but, having observed it, I hold to describing and showing one time more that pathological facts do not always exactly give the same results as experimentation. The duration of anosmie varies following the cause that produces it. Thus, when the olfactory nerves have been destroyed by a tumor, or have become atrophied, the sense of smell is completely abolished and does not return; but, when it arises from a traumatic anosmie, or follows a coryza, the sense of smell may be temporarily lost as well for all time. We have cited numerous observations in which the olfactory functions have been repaired after a lapse of time which has varied between three weeks and seven months, an important fact to know, and which permits us to hope for the re-establishment of the function when it has not been abolished more than a year.

The loss of smell is not, it is true, of grave consequence as regards the general state of the health, nevertheless it is a disagreeable infirmity, above all by reason of the perturbation that it occasions more generally in the sense of taste.

In the meantime, if some patients are very painfully affected by the loss of this sense, many give but little thought to it, and it is only accidentally that they inform the physician of it. It is not necessary to regret this too much, for the therapeutics of the infirmity are absolutely nothing. We find nothing as regards this subject among authors. I have tried veratrine, and sterna-

tatory powders for the purpose of stimulating the nervous ramifications of the pituitary fossa; but these attempts have been completely fruitless, and when patients have recovered the sense of olfaction, it is only to the efforts of nature that they have owed their cure.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, April 12, 1871.

DR. A. L. LOOMIS, President, in the Chair.

TUBERCULOUS DISEASE OF KIDNEYS.—Dr. Sewall exhibited two kidneys taken from a man aged 28, who died two weeks before the date of the meeting of the Society. Dr Sewall saw him only three days before he died. The only history obtainable was that in the latter part of the war, while in Virginia, the patient had a severe attack of intermittent fever, which reduced him very much. Since that time he represented himself as never enjoying good health. When Dr. S. saw him he presented the general appearance of a patient in advanced pulmonary phthisis. Physical examination of the chest failed to give any signs of the disease. On further examination a firm and resistant swelling, partly superficial and partly deep-seated, was discovered in the left lumbar region, extending as far forwards as the anterior superior spine of the ilium. No diagnosis was made. The patient gradually sank without brain symptoms, and died in the course of three days.

On opening the abdomen at the autopsy, both kidneys were filled with enormous abscesses, apparently containing broken-down tuberculous material. The right kidney weighed fifteen ounces, and the left weighed eight and a half ounces. All along the left side of the spine the glands were enormously enlarged, and converted into a great cheesy mass extending four or five inches along the side of the spine. The spleen was diffuent. In consequence of being hurried in the post-mortem, no examination was made of the lungs. The microscopical examination exhibited irregular granular formations in great abundance, with imperfect cells, some fatty matter, and a great deal of amorphous stroma. Some part of these kidneys had a little healthy structure, which probably was sufficient to secrete what little urine he made. He believed that the specimen illustrated primary tuberculosis of the kidney, an opinion concurred in by Dr. Janeway.

CUTANEOUS CANCER.—Dr. Finnel presented, on behalf of Dr. Charles Phelps, an amputated leg from a patient at St. Vincent's Hospital. The disease first showed itself about three years ago, in the integument of the central portion of the limb over the tibia, and from that time commenced gradually to extend until

it covered a circumference equal to two-thirds of the space between the knee and ankle joints. The specimen was a rare one, from the fact that the disease was confined entirely to the integument.

TRAUMATIC RUPTURE OF SPLEEN.—He next exhibited the spleen, kidneys and heart removed from the body of a woman aged sixty-five, who was struck in the left side of the chest by a case of goods descending through a hatchway. She immediately complained of a good deal of pain at that point, and gradually sank under it for two weeks, when she died. The owners of the hatchway, being called to account, claimed that death had been caused by intemperance. The autopsy, however, made at the instance of the coroner, showed that death was really the result of a rupture of the spleen. The organ was rent for six inches in a longitudinal direction, and a large amount of effused coagulated blood was found in the fissure. The kidneys showed also extravasation of blood. The heart was exceedingly fatty. From her gall-bladder were removed two biliary calculi, one of the size and shape of a marble, smooth on its exterior; the other much smaller and covered with facets.

SUDDEN DEATH FROM INJURIES OF THE ABDOMEN.—There were no evidences of any external injuries. In referring to the latter point, he believed it was not unusual for fatal injuries of the abdomen to exist and yet show no bruises upon the surface. Such was the case, for instance, in the recent affair in which a policeman foolishly and thoughtlessly struck a drunken brawler across the abdomen with a club. It will be recollected that the injured man died soon after reaching the station-house. Death in this case was no doubt caused by a shock; but this shock was intensified in its results by the previous debilitated state of the deceased, he having led a life of dissipation. Dr. F. believed that many cases of sudden death could be more satisfactorily accounted for by such a supposition than by the fashionable verdict of congestion of the brain. The point of interest to him was whether, as a rule, such cases presented any marks of external injury on the one hand, or any internal extravasation on the other—anything more, in fact, to account for death than the mere shock to the great sympathetic.

Dr. Flint recalled a circumstance in point:—Two waiters in a hotel were engaged in a playful scuffle, in the course of which one gave the other a gentle tap upon the epigastrium, when death ensued almost instantly. There were no marks of external injury.

Dr. Finnel had seen similar results follow the kick of a horse; but in a great majority of such cases there was some extravasation.

Dr. Van Geison alluded to a case which had some bearing upon the fact in a medico-legal point of view. A couple of Ger-

mans were celebrating a birthday, and having drunk freely of lager beer, were aroused at three o'clock by a party bent on a disturbance. A slight fracas was the result, after the German fashion—a great deal of loud talking, but no very hard blows. The disturbing party was said to have been struck by a hammer at a point corresponding to the apex of the heart, death resulting twenty minutes afterwards. Both the brothers were indicted for manslaughter, and he was called upon to testify for the defence. The question was, How far was that blow instrumental in causing death? The autopsy was very negligently made, and only the cavity of the chest had been examined. The verdict of the coroner's jury had been death from paralysis of the heart. The whole history of the case pointed, however, to apoplexy as the real cause of death. The deceased was fifty years of age, had been a very hard drinker, had had secondary syphilis, and his arteries were probably in an atheromatous condition. If the brain had been examined, all doubts would have been dispelled; as it was, however, the jury refused to be satisfied, and both brothers were found guilty of manslaughter.

EXSECTION OF HEAD OF FEMUR FOR MORBUS COXARIUS.—Dr. Sayre exhibited several specimens of exsection of the head of the femur for morbus coxarius. The first was from a child four and a half years old, who had suffered from hip disease for two years, at the end of which time it exhibited all the characteristics of the third stage. The disease was caused by a fall down a flight of stairs.

Dr. Sayre saw the case for the first time April 2d, and then opened a large abscess. On account of the size of the latter, the operation for exsection was postponed until the 22d, in order to give the sac a chance to retract. The head of the femur was found lying loose in the cavity; and the unhealthy portion of the cervix was removed by the saw. The child was placed in wire breeches, and in the course of the next twenty-four hours was well enough to be driven out to take the air in Central Park. Since then there had not been an untoward symptom. The point of interest was the speedy and satisfactory recovery of the patient.

A second specimen was from a child five years of age, sent to Bellevue by Dr. Dunster. The case had advanced to the third stage. The head of the femur was removed on the 23d of February. • An attempt was made to adjust the wire breeches; but not having a pair to fit, Dr. — placed the child on its belly, and made a plaster-cast of the back and posterior portions of the lower extremities, by which means the hip was kept perfectly steady and the patient made comfortable.

A third specimen was removed on the 28th of February from a boy nearly nine years of age. His case had likewise advanced to the third stage. The disease was the result of a fall from a

wagon two and a half years before. After the operation the wire breeches were used. The wound was nearly healed ten or twelve days ago. The only draw-back was a bed-sore on the sacrum and on the back of the heel. There was very little shortening in the last two cases.

Dr. Flint asked if Dr. Sayre had found any connection between morbus coxarius and pulmonary phthisis, in regard to cause and effect; whether, in a word, there was any special liability to phthisis when the matter was so long pent-up, as it must have been in these cases.

Dr. Sayre replied in the negative, and stated that he had performed in all thirty-nine operations, with eight deaths. In only two was there any tuberculous disease of the lungs found post-mortem. Nine of the thirty-one are living, and have as yet shown no signs of phthisis.

SWALLOWING OF A PIN, ETC.—Dr. F. V. White presented a pin an inch and a quarter in length, which had traversed the alimentary canal of a girl seven years of age. The little patient had been playing with a spool and a pin, and had accidentally swallowed the latter on the 11th of February last. Aside from a slight difficulty in deglutition, there was no other evidence of serious inconvenience. The mother administered a dose of castor-oil, and the discharges were watched. Nothing appearing, a second and a third dose of the oil was administered, when the pin made its appearance, sixty-nine hours after being swallowed, lying longitudinally in a mass of fæces, with its head downwards. In connection with this case he referred to a rather remarkable one (*Med. Chirurg. Trans.* vol. xxvii., *New Series*, p. 5), which he had met with in his reading. The patient was seven years of age; had been troubled for four years with great difficulty in urinating, and had finally died without a diagnosis. At the autopsy the vermiform appendix was found adherent to the right side of the bladder, and in the cavity of the latter was found a stone which had for its nucleus a pin. This pin was supposed to have been swallowed, to have found its way into the vermiformis process, and thence by contiguous ulceration into the bladder.

In conclusion, he asked what was the best treatment for such cases, to insure the safe passage of the foreign body.

Dr. Flint thought that generally cathartics were counter-indicated, it being safer to leave the case to nature, and administer as much solid food as the patient would take.

FISH BONE IN LARYNX—THE UTILITY OF LARYNGOSCOPE.—Dr. Van Geison presented a small fish-bone, which he had removed from the top of the larynx of a lady who came into his office five weeks before, suffering from extreme dyspnoea. He immediately made a laryngoscopic examination, and detected the

foreign body lying diagonally across the top of the larynx, just ready to drop into the box below. She was directed to keep perfectly quiet, when the bone was removed with an ordinary dressing-forceps. The practical lesson to be drawn from the specimen was, that every physician should be sufficiently skilled in laryngoscopic examinations to be ready for such emergencies. He was convinced, from the position of the fish-bone, that it required a very short time, or a very little change in position, to have placed it beyond the immediate reach of the operator, in which case the melancholy history of a patient recently reported by Dr. Buck, in which tracheotomy had to be performed after four years of great suffering, would have been repeated.

Dr. Loomis presented a heart, with the following history, from Dr. Milliken, House Physician of Bellevue:—Henry Clemens, admitted April 11, 1871, æt. 32; single; cabinet maker by occupation; nativity, Switzerland.

Patient gives hereditary history of pulmonary phthisis. Had an attack of acute articular rheumatism when 17 years of age, from which he made a good recovery. States that neither at that time, nor since has he experienced any præcordial pain; but has noticed that, after indulging in tobacco (for he has been an inveterate smoker), he would suffer from palpitation of the heart. He has had a cough, dating some time back, with some expectoration of a pearly-white material, which he says he coughs up at night, at which time his cough distresses him most. About two weeks ago, for the first time, he noticed that the sputa was streaked with blood. His cough remained about the same in character until one week ago, when he experienced a severe paroxysm of coughing, which was instantly followed by hæmoptysis, which continued for two or three days. Since the occurrence of hæmoptysis, he has had night-sweats, loss of appetite, depreciation of strength, and experiencing a feeling of general malaise and inaptitude for any kind of work. He complains also of insomnia and restlessness; and, though he is up and about, his haggard countenance and relaxed look speak well of the enfeebled tone of his general strength. His pulse is about 80, regular, but quite feeble; respiration somewhat hurried, but easily performed.

ANGINA PECTORIS.—DR. FINNEL exhibited the heart, kidney, and portion of the apex of the lung of a German physician, who died at the age of 64. For several years he had been afflicted with angina pectoris. He had tried all sorts of medication, and finally in desperation resorted to whiskey, of which he would drink large quantities. He finally died rather suddenly. A certificate was rendered of nervous apoplexy, which not satisfying the coroner, an autopsy was ordered. Both kidneys were imbedded in fat, and were granular. The heart showed very little change, with the exception of a slight thickening of the coronary

artery and the margins of the aortic valves. There were deposits in the apices of both lungs.

EPILEPSY AND INDURATION OF CEREBELLUM.—Dr. F. presented a second specimen, a portion of the cerebellum taken from the body of a colored man 52 years of age. For several years past he had been the subject of epileptic attacks, and just previous to death he had fourteen fits in the space of two hours. The autopsy revealed a marked anæmic condition of the brain and a slight induration of the cerebellum.

SCIRRHUS OF ABDOMEN.—He next exhibited a specimen removed from the body of a woman 54 years of age, married and childless. For the past three years she had been suffering from abdominal pains, which were accompanied by the appearance of a tumor in the left side. She had suffered besides with umbilical hernia for over thirty years, and the truss which she had worn the most of that time, had produced considerable induration at its points of contact. The case was looked upon by some as an ovarian tumor of the left side. Dr. F. saw the patient during life, and was inclined to the same opinion. While the patient was being prepared for the preliminaries of tapping she died. At the autopsy the abdominal cavity was found more or less filled with a serous fluid, the result of a serous inflammation caused by a scirrhous mass on the right side. It was sub-peritoneal and seemed to involve the sub-cellular tissue principally, and to some extent the abdominal muscles. It seemed to have had its origin in the umbilical irritation.

ADHERENT PERICARDIUM AND ITS RELATION TO SUDDEN DEATH.—The fifth specimen was a heart taken from the body of a colored man who, after having rheumatism at different times for several years, died suddenly at the age of 42. No other lesion than a completely adherent pericardium was found at the autopsy. So close was this adhesion that the membrane seemed as if a part of the heart itself. The question was, whether this adherent pericardium had anything to do with the cause of death.

Dr. Loomis did not think it had.

Dr. Lente, who was of the same opinion, related two cases in point. During the war there was a cadet at West Point who, when half through his course, was seized with symptoms of cardiac disease, which eventually became so marked and annoying that he was compelled to give up in turn the horseback exercise, double quick, and even the ordinary drill. Dr. Lente was requested by some of the friends to see the patient, which he did in company with the post surgeon. The evidences of severe cardiac disease were very marked on auscultation. Although it was evident that he would be incompetent for active service, it was thought best to allow him to pursue his studies in the prospect of being fit for office duty. He graduated, and was appointed

on Gen. Sherman's staff; while serving thus, he was shot through the right chest, the ball passing from the epigastrium to the shoulder through the liver and lung. He, however, recovered from this, although his right side was more or less disabled. He came on a visit to the country, and while riding a fractious horse, being unable on account of his wound to manage him, was thrown and almost instantly killed. At the autopsy the pericardium was found universally adherent. This condition did not, however, have anything to do with the patient's death.

Dr. L. also had a case in a child who had been examined by Dr. Cammann, and was pronounced to have heart disease. The patient finally died with some acute chest affection, and at the autopsy an adherent pericardium was found.

Dr. Loomis remarked that it was not uncommon to meet with such cases, in which an adherent pericardium had nothing whatever to do with the cause of death.

Dr. Janeway remarked that death might occur in such cases as the result of the fatty degeneration of the heart substances underlying the pericardium.

Dr. Lente exhibited a proliferous mammary cyst, which he had removed from a patient who had been suffering from the disease for three or four years.

ON THE EFFECTS OF CONIUM IN NERVOUS AFFECTIONS.

By DRs. M. GONZALES ECHEVERRIA and A. E. MACDONALD.

The especial object of this paper is to call attention to the value of conium in epilepsy and similar convulsions. Details of a number of cases are given, but of these we can only mention particularly that of an infant, six days old, suffering from most violent convulsions, consequent upon chronic hydrocephalus.

Every remedy proved powerless to arrest even temporarily the convulsions and to quiet the infant, excepting the succus conii (from William Ransom, Hitchin, near London), at first ten minims every two hours, gradually increased to one fluid drachm every two or three hours, until the convulsions would discontinue with the appearance of narcotic effects of conia. Among the immediate changes noticed when the infant took twenty minims of the succus every two hours, were a lessening of the fits, with regular evacuations of the bowels, and an excessive secretion from the kidneys, urine being passed almost every hour. The frequency of the pulse and respiration decreased, the skin became cool, and the infant would sleep for five or six hours, free from fits and screaming, and with the limbs quite relaxed. A second or third drachm of the juice, exhibited two or three hours after the preceding, would show very strikingly the deficiency of the

peripheral circulation, the pulse at the same time being much more frequent, but weaker, respiration hurried and irregular, and the hands and feet cold and bloodless. The pupils would become greatly dilated, with perceptible strabismus, the face flushed, the tongue dry, and the infant, when sleeping soundly, would be observed at times to move the lips and mouth in an automatic manner, as though sucking, or would be seized for a while with hiccough or vomiting—these two last-mentioned phenomena always before the production of complete narcotism. In addition, the bowels would act but rarely, and the fæces, white and hardened, would, on their passage give the infant great pain. The maximum of succus conii ever employed was three fluid drachms within twelve hours, and the succus was administered in this manner, with occasional intervals, for several weeks. The infant, however, died in a severe fit at a time when he was apparently less distressed, and had not taken the juice of hemlock for over a week.

The authors have also used the remedy in chorea, hemiplegia, locomotor ataxia, and myelitis, with the result of obtaining quiet and sleep. To obtain effects, full repeated doses must be used. It generally requires half an ounce of the English juice, or half to one drachm of Squibb's fluid extract, to influence decidedly the nervous centres. Sometimes much larger doses are necessary. The utmost effect becomes manifest in from twenty to thirty hours after these amounts have been taken.

The operation of conia lasts from two to six hours, and then disappears, leaving no other traces than a sense of diminished muscular energy, in a few instances accompanied by nausea or hiccough, and more frequently by a burning sensation on urinating, both of which phenomena are of short duration.

It is important that we should remark—and in this our observations corroborate those already made by Harley—that the weaker and more inactive the epileptic is, the larger will be the quantity of conium required to affect him as a narcotic. And it is striking, as further asserted by Harley, that conium really operates as a tonic upon the muscular system. In this respect conium, when not carried to the degree of paralyzing the muscular power, resembles in its action cod-liver oil. The fact is quite remarkable with epileptics taking three or four drachms of the juice, or thirty minims of Squibb's fluid extract, three times daily, for the irritability of the spinal system gradually diminishes, with notable improvement in their bodily condition. This tonic effect of conium is no less obvious in myelitis. We have in no case noticed that conium interferes with the sensory functions.

We have found the pulse regular throughout the operation of conium, but not of undiminished force and volume, as stated by Harley. Our observations lead us to believe that conia, from its

special influence on the pneumogastric nerve, operates on the innervation of the heart with paralyzing effect, the internal sensibility of the organ being affected through the depressor nerve, or sensitive cardiac branch of Cyon, which accounts for the bloodless condition of the limbs, from contraction of the peripheral blood-vessels, when the full action of conium is produced. Conium, therefore, differs from bromide of potassium, which operates in a paralyzing manner mainly on the vaso-motor nerves. We are satisfied that the sympathetic system is primarily involved in the production of epilepsy, circulation being thereby deranged from the inception of the disease. Hence the advantage which may be derived from the judicious employment of remedies like bromide of potassium and conium, operating chiefly on the motor nervous tracts and the innervation of the whole circulatory system. We look upon cerebral anæmia, due to excitation of the arterial nerves, as the initial link in the chain of epileptic phenomena. The confusion generally made between hyperæmia and congestion explains why cerebral hyperæmia may be still considered by some writers as an etiological factor of epilepsy. Hyperæmia is a physiological phenomenon of short duration, depending upon stimulus and greater action of the venous system, whereby the flow of oxygenated blood is accelerated; whereas congestion is, on the contrary, a morbid phenomenon, the result of vascular paralysis of more or less permanency, and causing stagnation of the blood. Although the capillaries overflow, as we may say, in either case, hyperæmia is of such a transient nature that it cannot induce structural changes, which are, however, the necessary consequences of congestion. Excitation of arterial vaso-motor nerves causes anæmia, but such excitation, as just observed, is momentary; and, if prolonged, it soon paralyzes the arterial walls, congestion following thereon. It suffices, therefore, to bear in mind such teachings of the physiology of the circulatory systems, to understand how cerebral congestion must be, and is, so intimately associated with epilepsy, notwithstanding the occurrence of anæmia at the very onset of the epileptic paroxysm. The one—anæmia—is the initial, the other—congestion—the consecutive phenomenon of epilepsy; both originating in a derangement of the sympathetic system.—*Medical Times*.

THE ACTION OF MERCURY ON CHILDREN.

By WM. STEPHENSON, M. D., Physician to the Royal Hospital
for Sick Children.

Dr. STEPHENSON, after calling attention to the fact that pepsin is often more useful than mercury in children in whom there is derangement of the alimentary apparatus, even when the latter

is apparently more hepatic than stomachic in its origin, remarks in substance as follows:—There is a very prevalent error, that children are less susceptible to the constitutional action of calomel than adults. This opinion is based solely upon the difficulty of salivating young children. The truth is, children are more readily affected and more readily injured by mercury than adults. We have not salivation as a guide, but take another index. In syphilitic children I have frequently observed decided results in six days from a grain of gray powder night and morning. Although this is a therapeutic rather than a physiological action, it yet indicates that the system is brought under the influence of the drug.

A smaller amount properly given will, however, produce very perceptible effects. Mercury produces in children a state of pallor, feebleness, sickness, and fretfulness, with green mucous evacuations. The result depends much upon the method of administration. The effect is produced in two ways: first, by the irritant action on the alimentary mucous membranes; and secondly, by the action on the system in general. Much of the depressing influence may be avoided by careful administration. Another effect is the production of anemia. This I regard as most important symptom to be watched for in the administration of mercury to children. If we take the depressing influence and the production of anemia, and not salivation, as our tests, we may affirm that children are at least as easily affected as adults by mercurials.

In simple intestinal derangements, where a healthy child is suffering from constipation, and passing white chalky stools, I have treated some such cases with mercury alone. The results have been: first, griping, without change in the character of the motions; then the passages are more frequent, softer, and mixed with green; then the mercurial motions proper are obtained, and continue for some days. Stopping the remedy; in favorable cases a return to healthy evacuations takes place, but very gradually, and seldom without some other remedial agency; in other cases, the old chalky motions again appear. A dose of castor-oil, and proper regulation of the diet, will often bring about a more speedy result; and when compared with rhubarb and phosphate of soda, the action of mercury is far from satisfactory.

In cases where there is diarrhea with copious white stools, mercury has seemed to do more harm than good. In the obstinate and protracted retching of a bilious attack, I have seen the vomiting arrested by a few grains of calomel. I employ it in some cases in robust children, where the vomiting is obstinate and the bowels confined, without a tendency to irritability of the mucous membrane. It should be given in full dose, and not repeated. While I would, then, limit the use of mercury in intestinal affections, I believe it of great benefit in certain cases.

stitutional affections. In infantile syphilis I have the greatest confidence in it. Experience has taught me that in cases where I have sought to produce change by the use of the iodide or other preparation of potassa, but signally failed, I have succeeded by administering mercury.

DR. STEPHENSON believes that in syphilis mercury acts not on the blood, but upon the tissue cells, and that it does not cure syphilis by removing the diathesis, but by modifying the results of the diathesis; and hence, in a strict sense, it does not cure syphilis.

His experience teaches him that mercury acts most beneficially in the sluggish constitutions of strumous and syphilitic diathesis, and most injuriously in the tubercular diathesis. His conclusions are as follows:—

1. Mercury may be employed to influence the constitution with perfect safety, and without any injurious effects on the general health.

2. That to obtain its therapeutical action it is not necessary to produce its visible physiological action, and that it becomes injurious so soon as these are manifested.

3. That in children its injurious effects are as easily induced as in adults, but must be looked for in its depressing influence and deterioration of the blood.

4. That it should be only used to stimulate nutritive changes, not to alter the blood, and that it should be administered occasionally and at intervals, not continuously.

5. That its use in modifying acute inflammatory action is very limited, but that there can be no question as to its power over the products of inflammation, in starting the processes of resolution and absorption.

6. That no amount of abuse of the medicine can in any way invalidate the results of its effects when it has cured where other remedies have failed, or lessen in any measure the position which I here defend of a judicious use of the medicine.—*Edinburgh Med. Jour.*

REMARKS ON THE PATHOLOGY AND TREATMENT OF STRICTURE OF THE URETHRA.

By W. F. TEEVAN, B. A., F. R. C. S., Surgeon to the West London Hospital and to St. Peter's Hospital, late Lecturer on Anatomy at the Westminster Hospital. Read before the Medical Society of London.

I intend here to make a few very brief remarks on the pathology and treatment of stricture of the urethra, as time will not permit me to do more than merely enunciate a series of facts which I have by inquiry ascertained. It appears to me that, in

order to arrive at any satisfactory results, we must be thoroughly acquainted with certain facts required to be elicited; next, see what are the indications as to a scientific treatment; and, lastly, we must find out the values of the varying remedial agents which we propose to ourselves as means of cure. I am constantly in the habit of putting to students, who have undergone a professedly thorough course of surgical training, this simple question: When would you say that a man was suffering from stricture of the urethra?—and I rarely get a correct answer. Students have but a vague and unsatisfactory knowledge of the pathological state. How, indeed, could it be otherwise?—for most surgeons would declare that if a No. 10 English catheter could be passed into a man's bladder, there could be no stricture; and we thus have this most extraordinary and serious fact presented that the urethra may dwindle down to one-third its natural calibre, without so grave a pathological state being recognized—nay, I would say, not even suspected. I consider that the diagnostic power of an educated surgeon ought to be something more and above the untutored perception of a working man; but in this complaint it is not so, for it usually happens that the patient is the first to discover the existence of a stricture by informing us that he has a difficulty in making water. Not until the enemy is at the door is the surgeon aware of his presence; scout or skirmisher he hath not. It ought to be our aim to recognize the disease in its earliest incipency, and so abolish all necessity for any recourse to operative procedures. Can we do so? Most certainly. If there be one complaint which more than another worries a patient, whether he be rich or poor, it is the continuous presence of a gleet; and for this disease he goes about from hospital to hospital seeking to get it cured. Now, if such a patient present himself to us with a gleet of more than six months' duration, we shall always, on examining the urethra, find important pathological alterations, the most serious of which is contraction. The only instrument which can effect the acquirement of the knowledge we seek is the bougie a boule. I define stricture to be "any diminution of the natural calibre of the urethra, the result of the contraction of organized lymph." This definition, consequently, embraces the disease in all its stages: and if we diagnose the complaint in its earliest incipency, we shall render the sufferer an immense service, for we shall entirely purge the disease of its evil effects on his renal organs, and abolish all operative procedures. The first sign of a stricture is the presence of a gleet of more than six months' duration; and, long before we have the symptoms resulting from a mechanical contraction, we have usually some more or less well-defined symptoms, such as increased micturition, pain in the loins or perineum, trembling at the knees whilst urinating, or a sensation of cold water running down the spine. I would, however, insist upon one point, and that is, whenever a patient comes to us com-

plaining of a gleet of some months' duration, we ought never to omit to examine the urethra with the ball-staff.

Now a few words as to the seats and physical attributes of strictures. Let it be ever kept in mind that stricture is atrophy, not hypertrophy; and that not only does the urethra become contracted, but also tortuous, which latter fact shows the inapplicability of metal instruments in the treatment of the disease. Strictures are usually situated in the triangular ligament, and their division into bulbous and membranous is entirely artificial, and not warranted by any facts; I group these together, and call them alike "subpubic," thus simplifying the nomenclature. It will be found that this stricture is usually at a spot five inches and a half from the meatus externus. Why is this variety of stricture the most common? For the simple reason that, when there is increased vascularity between the canal and the ligament, the latter commences to act as an irritant and constricting agent by preventing the expansion of the urethra in the act of micturition. But you may say to me—How, then, is it we sometimes get a penile stricture without a subpubic one? For the reason that we constantly meet with men whose fibrous apertures are larger than they ought to be. If the aperture in the triangular ligament be larger than the normal size, the edges of the opening will not exercise any constriction on the urethra when expanded in the act of micturition. If, therefore, we meet with penile stricture only, we may conclude that it is because the patient has a very large aperture in his triangular fascia. If we examine one hundred patients, we shall find that eighty have the subpubic form of stricture; eighteen the penile variety, which is situated at a spot varying from $2\frac{1}{2}$ in. to $3\frac{1}{2}$ in. from the meatus externus; and the remaining two have strictures at the orifice, which I consequently call orificial. It is rare to meet with a subpubic stricture without finding some induration or leatheriness at the penile spot. Orificial strictures are often caused by chancrous ulceration. I have measured the urethrae of one hundred adult males, and find the average length to be $7\frac{1}{2}$ inch, thus rather shorter than is usually supposed. Strictures give to the bougie a boucle either the sensation of travelling through a *tunnel*, or the feeling of passing through a sharp and well-defined *ring*. I therefore speak of strictures as being either tunnel or ring strictures. Subpubic strictures are generally of the former kind, whilst orificial are of the latter. Penile strictures are as often ring-like as tunnel-like.

What is the result required to effect a cure of a stricture? No urethra can ever be said to be cured till the diseased and contracted portion is restored to its normal calibre. Some time ago I instituted a series of practical inquiries to ascertain what was the normal capacity of the urethra, and I found that the subpubic urethra will admit the terminal joint of the forefinger without

laceration. The results will be found at p. 186 of the "Pathological Society's Transactions" for 1866. Now, all means which have not for their end the restoration of the urethra to its normal calibre will fail—that is to say, if the urethra, by dilatation, sudden or gradual, rupture, or incision, be only enlarged to a diameter less than its normal capacity, we shall most infallibly have a return of the contraction, unless we from time to time keep up the diameter of the tube to that which we had stretched it. In severe forms of stricture there is only one instrument that can be introduced, and that is the French filiform bougie; and I venture to assert that, with patience and perseverance, a surgeon will rarely fail to introduce this instrument. Whatever treatment be adopted for stricture, it must always be followed, and nearly always preceded, by gradual dilatation. It thus appears that there is *only one* which can be called *the treatment*—that by gradual dilatation; all other methods are merely auxiliaries. The bougie can nearly always dispense with the knife or dilator, but they are useless without the bougie. In a limited number of cases the bougie will fail to enlarge the contracted urethra beyond a certain point, or if dilated to a considerable size, it will speedily contract again. In such cases an operation is desirable.

All operations on the urethra may be divided into two classes: those which burst the stricture by lacerating, and those which divide it by cutting. Which are preferable? Surgical pathology settles the point at once, for we know that there is more contraction after a laceration than after a cut. Hence we ought to choose that kind of operation which is attended with the least contraction, which, consequently, will be the cutting one. From what I have seen of Mr. Syme's operation in the practice of different surgeons, and from all I have heard of it as practiced by its originator, I have come to the conclusion that it ought never to be resorted to unless the state of the perineum is such as to preclude all other operations. The treatment of stricture by forcible rupture would seem in this country to be following a similar fate to what it had in Paris, where it was first introduced, as it has been discontinued by Sir W. Ferguson, Mr. Coulson, Mr. Henry Smith, and other surgeons. The unknown rate of mortality attached to it is not calculated to recommend it, and I am aware of twenty-one deaths which have followed its use in the hands of different hospital surgeons. The great advantages which gradual dilatation, when carried out by the French elastic instruments, possesses over all other methods is, that it is absolutely harmless, no death ever having taken place from its employment, and that it can be employed in the most diseased subject without the slightest fear. It is also the only treatment which can restore the urethra to its normal calibre.

But whatever operation be employed for the relief of stricture, must be supplemented by the regular use of the bougie for the

rest of the patient's life, as no known method of treatment is free from an infallible relapse apart from its use. It follows, therefore, that, inasmuch as in the majority of strictures the bougie can effect all, and more than the knife or dilator can do, and, unlike them, can never kill a patient, it presents itself to us for our acceptance with recommendations possessed by no other known instrument; and I venture to assert that the bougie will be used when urethrotomes and dilators are forgotten.

The treatment of stricture may be summed up—1. Gradual dilatation, wherever possible. 2. Subcutaneous urethrotomy, wherever desirable. 3. External urethrotomy, without a guide, wherever necessitated.—*Lancet*.

CASES OF CANCER TREATED WITH CUNDURANGO.

By D. W. BLISS, M. D., of Washington, D. C., Professor of Urinary Pathology in the Medical Department of Georgetown College.

My attention was first attracted to this remarkable agent during a professional attendance upon Mr. Flores, the Minister from Ecuador, through whom his government had conveyed to our Secretary of State a portion of the shrub, together with printed statements of its successful employment by eminent South American physicians. Having always conceived that a remedy would sooner or later be discovered for the cure of carcinoma and tuberculosis, so long the *opprobria medicinarum*, I was at once interested in the direct and encouraging exposition of the Quito doctors. With the hope of benefitting my own patients, and effecting some good for others, I determined promptly to test its merits by actual experiment, regardless of the charges and possible opposition to which I knew my honest efforts would be subjected by the hypercritical and ungenerous of my professional *confreres*. Fortunately, several cases of unequivocal carcinoma were then under treatment. Accustomed to the remorseless ravages of a malady for which even the surgeon's knife afforded no adequate relief, I approached the experiment not without misgivings of success, but with the fixed purpose to render the test as complete as the limited supply of the plant in my possession would allow.

Mrs. Matthews, the mother of the Hon. Schuyler Colfax, had been the victim of mammary cancer for a long period, which had already assumed secondary and constitutional symptoms in a marked degree. On the 20th of April last, I placed her on the decoction of cundurango, and had the gratification of observing an early and decided change for the better, in both the local and general conditions. One of its almost immediate effects was the relief of pain, and a free diaphoresis, characterized, by an odor

distinctly observable of the infusion itself. Upon the return of Mrs. Matthews to her place of residence in Indiana, I still continued to direct her treatment, and furnished the requisite supplies of the medicine.

On the 9th of May, just thirteen days after the commencement of the new remedy, her husband addressed me a letter, from which I make the following extracts:

* * * * *

"The stony condition of the tumor has given place to softness. This morning I notice about one-third of the surface has turned from a scarlet to a white color, and it has commenced suppurating as though the thing were dead and coming out. The whole tumor is very much flattened, the discharge is different and not near so offensive. The greatest improvement is in her complexion. From a *tallowy*, puffy-looking, and somewhat bluish skin, she is regaining her old natural look, the skin shrinking, becoming wrinkled and clear.

"I am so happy in the prospect of a cure that I feel like a new man, as though a ton of lead had been lifted from my heart. Is it not a little singular, it has not had any perceptible effect on her nervous system? Her digestion is good, and she begins to feel that she will get well."

On the 14th of the same month Mr. Matthews writes as follows:

"This is the seventeenth day since I commenced the use of cundurango; shall cease for a few days, and note carefully the effect. When I began the treatment, Mrs. Matthews' breast was almost as hard as a stone, about four inches in diameter, the cancer itself two inches in diameter, with raised edged, hard and scarlet-colored, bleeding profusely at the slightest touch, emitting an odor of the most sickening and disagreeable kind, discharging a brownish, cancerous, limpid fluid; the countenance bloated, tallowy-looking, with a bluish pallor of the whole face; the lips turned blue at the least exertion, so that I have been very much alarmed, fearing a rapid crisis and dissolution; at the same time the tumor itself enlarged with fearful rapidity, so much so that I could notice the growth from day to day.

"Now all is changed—the countenance has resumed its old familiar look; she moves about with great sprightliness, the blue of the lips no longer indicating fatigue or effort. The glandular swelling under the chin is gone; strength increasing; the tumor itself much flattened and decreased in protuberance; the color changed to a white, maturing sore; the limpid, cancerous discharge ceased, and in its place a healthy discharge of white matter much less offensive; the hardened glands are soft to the touch, the whole symptoms indicating most plainly to me that the treatment has, so far, neutralized the poison of the blood, and that another short campaign with cundurango will insure a complete cure."

On the 2nd of the present month I visited Mrs. Matthews, at

South Bend, and was indeed astonished at the rapid change which had taken place. The tumor had become soft, the color natural, the secondary glandular deposits had all disappeared. The improved complexion, muscular firmness, and elasticity of spirits, all pointed to an early and complete recovery.

Mrs. Handy, residing on M street in this city, was the next subject of experiment with the cundurango. This was a highly typical and fearfully advanced case of cancer uteri. The grayish color, unequal, irregular elevations of the ulcer edges, the sympathetic disturbance of the bladder, the paroxysms of intense pain, together with the hot, dry, shrivelled, yellow surface, the wasted muscles, sunken eyes, the small, quick, wiry pulse, revealed one of those sad cases, where all hope of remedy fails.

The cundurango, in the form of decoction, was administered first to Mrs. Handy on the 31st day of last month. A regular record has been kept from day to day, describing the least change of symptoms, but I have not the space to introduce it here. Suffice it that even in this extreme case the beneficial effects of this wonderful remedial agent have been most apparent. The pain has steadily declined, the diseased parts are less tumefied and sensitive, and the discharge is very slightly offensive. The cachetic appearance of this patient has much improved, and she expresses herself as feeling altogether better.*

A lady of the family of Hon. Mr. Gorham, Secretary of the United States Senate, has had mammary cancer of several months' duration, and her condition was pronounced hopeless by leading Northern surgeons. I was called to see her on the 1st of June, of this year, and found cancer of the breast, with secondary deposits in the shoulder and humeral portion of the left arm, attended by extreme rigidity of the neck, and almost complete immobility of the affected limb.

A careful daily record has been preserved of this case also, by which the most decided improvement is indicated. The mammary tumor has grown softer, and the line of skin-attachment bisecting the nipple is much less marked. The head, before stiff, is now perfectly free and movable, while the natural mobility of the disabled arm is restored, and the tissues, before hard, are now soft and natural. The general condition progresses favorably *pari passu* with the local improvement.

To both of these last mentioned cases I have invited my experienced professional friend, Dr. C. C. Cox, and the history of the treatment and its results have been carefully observed by that eminent physician. It may be proper to state that letters have been pouring in upon me from persons at a distance, suffering from cancer, who have had the opportunity to use but a very small portion of the remedy, and yet who report marvelous improvement in all the symptoms.—*N. Y. Med. Journal*.

* It is to be regretted that the supply of cundurango for this patient was exhausted a week ago, and no more will be in had until the 1st proximo.

CAUSATION OF SCARLATINA.

By DR. ALFRED CARPENTER.

At a meeting of the Medical Society of London, on January 16th, Dr. Carpenter, of Croydon, read a paper on the Causation of Scarlatina. He considered scarlatina as one of a series of diseases which are epidemic at times, produced by a combined force resulting from the effect of matter acting upon blood more or less impure. The formula $x y z$ might represent epidemic disease. It was proposed to consider x and y as centric numbers of the equation, as far as the body was concerned, and z as eccentric, as obtained from without. Thus, $x y z$ might equal typhoid, typhus, cholera, or scarlatina, according to the particular quality or power of the number z . Dr. Carpenter believed that scarlatina might arise *de novo*, having an apparently spontaneous origin, in any position in which the elements required for its development were brought together, and then exposed to the proper physical influences necessary for its growth. Instances were detailed to show how putrid and decomposing animal matter, blood, offal, etc., would cause scarlatina. In the case of three separate families living on a healthy hill, the disease seemed caused in this case by miasma blowing from some fields not far distant, which had been manured with slaughter-house refuse. Another case was given of an outbreak of scarlatina in a school of boys; and nothing seemed to prevent these outbreaks till it was proved that under the playground was a cesspool which received some refuse from a slaughter-yard. When this was directed elsewhere, the outbreaks of scarlatina ceased. Another instance was that where some children sleeping over a fowl-house, in which the fowls were killed and the blood poured on the floor, were all attacked with scarlatina. Dr. Carpenter's inquiries extended over ten years, and comprised 268 cases of scarlatina that he had attended without one fatal result. Dr. Thorowgood said that though he had never considered scarlet fever to be one of those forms of fever that might be generated by animal or vegetable decomposition, defective drainage, or other sanitary short-comings, yet the conviction was strong in his mind that the disease might be rendered increasingly severe and malignant when any of these were present in a community invaded by the disease. Dr. Simms inquired whether Dr. Carpenter could point out the one essential cause of scarlet fever. Dr. Richardson, alluding to his former researches on scarlet fever, said that he believed all he had at that time stated to be in the main still as true as ever. It was important to study the conditions of body favorable to the development of scarlet fever. His own experience would go to prove that the disease was as fatal among the rich as among the poor. The first effect of the

poison was on the nervous system. Much depended on the pre-existing state of the system in determining the severity of an attack; and at some periods of the year it seemed more fatal than at others. Dr. Routh inquired if the disease were more fatal among the people who were engaged about slaughter-houses. The President asked if the amount of blood-refuse which passed into the sewers influenced perceptibly the prevalence of the disease, and if those who consumed meat essences much were liable to scarlatina. Dr. Carpenter believed the disease to be common in the families of slaughter-men and butchers; and in those districts where much blood passed into the sewers and then became putrid, scarlet fever was almost sure to appear.—*Phil. University Journal*.

MEDICAL GLEANINGS.

FROM MEDICAL RECORD.

ULCERATION OF THE JUGULAR VEINS.—S. W. Gross, M. D., Philadelphia (*Am. Jour. Med. Sciences*), reports thirteen cases of ulceration of the jugular veins, communicating with an abscess or an open sore, from which the subjoined practical lessons are deduced:

First. That acute, destructive inflammation of the tissues of the neck, and deeply seated abscess, which has existed for some time, and suddenly takes on acute action, may, if unchecked in their progress, lay bare and perforate bloodvessels, and that this result is to be feared more particularly when diffuse cellulitis follows grave forms of scarlatina, or other acute specific diseases.

Secondly. That scrofulous abscesses and ulcers are not always indolent, but may under favorable circumstances, that is, in an enfeebled, broken-down condition of the system, rapidly assume phagedenic action, and lead to the same complication; and

Thirdly. That the large arterial and venous trunks are more liable to be involved than their branches.

OVARIAN CYSTS.—G. D. Beebe, M. D. of Chicago, Ill. (*Am. Jour. Med. Sciences*), observes, in regard to ovarian cysts, what he does not remember to have seen stated, viz.: that besides the well known tendency of monocysts to become polycysts with advanced growth, there exists the further tendency to a cancerous degeneration. While the fluid found in the primary cyst contains more or less coagulable material, the fluid obtained from the secondary cysts is much more highly charged, and in some instances will, upon the application of heat, coagulate to solidity. This has suggested the probability that, as a larger amount of plasma is here produced than attains the full development of normal tissue, degeneration of the exudation corpuscle and medullary carcinoma results. This view of the cancerous

tendency of polycysts has given force to the recommendation of an early extirpation.

INFLUENCE OF BROMIDE OF POTASSIUM ON OPIUM.—J. M. De Costa, M. D., of Philadelphia (*Am. Jour. Med. Sciences*), calls attention to the happy influence of bromide of potassium on opium. It does not destroy either the anodyne or the hypnotic effects of the opiate; on the contrary, it rather heightens both, and more particularly the latter. To quote from a patient's letter: "The more bromide I took the sooner do I get sleep after a dose of opium. Two doses of bromide (20 grs. each) are not usually enough to counteract the exciting effects, and procure sleep under five or six hours from the time of taking." The faintness from opium is the phenomenon most markedly prevented; next in the readiness of being influenced stand the headache, vertigo, and nausea; then the itching of the surface, and dry mouth. The bromide has seemed to act best when it is given some hours before the opium, and 40 to 60 grains—generally 40 grains—prove sufficient.

HYDRATE OF CHLORAL IN SINGULTUS.—T. L. Leavitt, M. D., of Germantown, Pa. (*Am. Jour. Med. Sciences*), records a distressing case of singultus which was relieved by five-grain doses of chloral hydrate in solution. The affection was almost immediately arrested by it, and never afterwards failed to control the spasm in a most satisfactory manner, proving of the greatest comfort to the last remaining hours of the sick man.

TUBERCULAR PNEUMONIA.—D. Francis Condie, M. D., of Philadelphia (*Am. Jour. Med. Sciences*), believes that the term *tubercular pneumonia* is adapted to the following class of cases: When a patient affected with tuberculosis is, from exposure to cold or damp, or to sudden transitions of atmospheric temperature, or from deficient clothing, attacked with bronchitis or pneumonia, the course of the disease towards a fatal termination is very rapid, as well on account of the crippled condition of the tuberculated lung, rendering it incapable of sustaining the inflammatory process set up in its tissues, until a favorable close occurs, as from the depressed vitality of the entire system, which is invariably attendant upon tuberculosis, precluding a resort to the therapeutic means adopted to arrest the inflammation of the lung tissues previously to their entire disorganization. The profession almost universally recognize the convenience of the term tubercular meningitis, tubercular peritonitis, etc.; why not also, then, tubercular pneumonia? indicating, respectively, inflammation seated in the tuberculosed meninges of the brain, in a tuberculosed peritoneum, in tubercular lungs, etc.

A NEW CLAMP IN OVARIOTOMY.—Washington L. Atlee, M. D., of Philadelphia (*Am. Jour. Med. Sciences*), states that in his numerous operations for the removal of the ovary he has tried

every method of securing the pedicle, except that of *pocketing* it, and he has arrived at the conclusion that the clamp is the safest, best and most successful in its results. This accords with the experience of Mr. T. Spencer Wells, of London. It is, therefore, of some importance to select that form of instrument which will best meet the objects to be attained. Until recently he has used the one employed by Mr. Wells in his earlier operations, simplified in its mechanism, but essentially the same in action. Still, the results are not quite satisfactory, particularly with a large pedicle, as the lips of the wound are not sufficiently approximated.

To overcome these objections, he has modified the form of the clamp so that the pedicle may be compressed in the *linear* direction of the wound, and at the same time to limit, within certain points, the expansion or spreading of the pedicle when the blades of the clamp are screwed together.

CASE OF ANOSMIA.—Dr. Hamilton, of Philadelphia (*Amer. Jour. Med. Sciences*), related at a meeting of the College of Physicians and Surgeons, a case of the loss of the sense of smell following a blow on the occiput.

PUERPERAL ECLAMPSIA.—From an extended view of this subject in the *Amer. Jour. Med. Sciences*, the following conclusions are drawn: 1st. That convulsions are centric or eccentric; 2d. That determination of blood to the head, although productive of a comatose state, is not the cause of convulsions; 3d. That convulsions follow directly the loss of blood on stoppage of the circulation of the brain; 4th. That the whole motor nervous tract is involved in the production of convulsions, and that other portions of the brain are not directly instrumental in producing them; 5th. Convulsions are consequent to the abstraction of nutrition in the motor portion of the brain; 6th. Anæmia predisposes to convulsions; 7th. That anæmia is produced by albuminuria, and connected with this is dropsy; 8th. That the blood in albuminuria and dropsy is deprived of its nutrient elements, and becomes hydropic; 9th. That the constitution of the urine corresponds to the constitution of the blood, and the amount of urea in it is in accordance with that found in the blood; 10th. That neither urea nor carbonate of ammonia in the blood constitutes the cause of convulsions; 11th. That in albuminuria the predominant symptoms are sopor and coma; 12th. That albuminuria is to be regarded in the same category of diseases as hemorrhage; 13th. That from the constitution of the blood in pregnancy, and especially when its hydropic condition is increased by albuminuria, there is engendered an especial aptitude to the occurrence of convulsive attacks, which has been called *convulsibility*. This depends upon altered nutrition in the nerve centres; 14th. That puerperal eclampsia and epilepsy are anafo-

gous affections; 15th. That the mechanism of convulsions involves the production of syncope, which depends upon the suspension of the heart's action, and that this occurs through the instrumentality of reflex action, by shock, or by loss of blood; 16th. That the carbonic acid of venous blood is not the originating cause of convulsions; 17th. That the order of convulsive movements is progressive, from above downwards. Syncope and loss of consciousness constitute the first symptoms; secondly, convulsions begin in the muscles of the eyes and face, and then occur in those of the larynx, throat, chest and extremities; thirdly, when laryngismus or complete asphyxia is produced, the convulsions are suspended by coma; 18th. That if air be gradually introduced into the veins of an animal, asphyxia is produced and no convulsions occur; but if introduced suddenly, so as to distend the right side of the heart and prevent its contractions, convulsions immediately follow. The same is the case with oxygen, carbonic acid, and other gases; 19th. When air and other gases are introduced into the carotid arteries, in amount sufficient to produce pressure, apoplectic symptoms are the consequence; but if air or carbonic acid, in quantity capable of being absorbed by the blood, be introduced, its presence is tolerated by the brain; 20th. That carbonic acid is irrespirable, and positively stupefying when inhaled, hence, asphyxia can be produced by it; 21st. That when asphyxia is produced in the course of convulsions by the impediment to respiration, and the blood becomes completely venous in the lungs and circulation, it, in connection with the pressure induced by impeded respiration, terminates the attack by a species of narcotism. In this way convulsions are self-limited.

A NEW VESICANT.—The Dutch physicians of Java have for some time used a vesicating tincture which is described by a contributor to the *Australian Medical Journal* as follows: Like Cantharides, Tinct. Andol Andol is obtained from a fly which is found in great abundance in China, and is of a dull, leaden, dirty color, and about twice the size of the Spanish fly; in general appearance being not unlike the large Australian blow fly. The tincture, which is the only preparation which the writer had seen, is prepared by the Dutch apothecaries, who import considerable quantities of the flies for this purpose from the Celestial Empire. The tincture is painted on to the surface of the part to be vesicated and dries in a few seconds, its effect being produced in from three to four hours. Before applying it the skin should be washed with soap and water, and then with common vinegar.

CONVEYANCE OF DISEASE BY DISORDERED NERVES.—Dr. Moxon, of Guy's Hospital, reports, in the *Lancet* of June 17th, the pathological appearances in three cases, which are evidence of this singular power which is thought by some to reside in the nerv-

ous system. In one, symmetrical bands of pleuritic adhesion were found to follow the course of the third and fourth dorsal nerves of both sides so exactly, that an examination of the spinal cord was instituted, and at the origin of these nerves was discovered an old dilatation of the ventricular cavity, sufficiently large to admit a No. 4 catheter, and two inches long. This was the only abnormal appearance in any of the nervous centres. Another case, which died of paraplegia, was discovered to have opposite to the eleventh and twelfth dorsal cartilage, a tubercle which occupied, and had nearly destroyed, the cord at that point. In the abdomen a crowded zone of miliary tubercles extended around the cavity of the peritoneum, lining the hypogastrium and false pelvis. It was remarkable that no tubercle was found on the diaphragm, omentum, or other viscera.

Another patient, who during life had had painful paraplegia with headache, aphonia, and paralysis of the left side of the tongue, revealed, after death, a free scattering of soft, round sarcoma cells in the course of the spine, in the bones. A mass of this cancer germ in the basilar portion of the temporal bone had destroyed the eighth and ninth cranial nerves on the left side. No visceral cancer was found. The muscles and nerves were atrophied, and the greater part of the cricoid cartilage of the left side was in a pulpy condition. It was not well determined if this degeneration was cancerous, but the coincidence of the location of the cancerous mass at the root of the eighth nerve, and the degeneration of tissues at its distribution, was too remarkable to pass without notice.

TREATMENT OF GONORRHOEA.—Mr. Berkley Hill (*Lancet*, April 29, 1871) speaks favorably of the jelly of copaiba in the treatment of the sub-acute form of this disease. This preparation is almost as firm as calf's-foot jelly, very attractive to the eye by its rosy red color, and not repulsive to the palate, its flavor being masked with peppermint. As it contains seventy-five per cent of copaiba, large quantities can be taken in a small bulk. If a piece as large as a filbert be rolled in wafer paper, it can be swallowed without being tasted at all. The first effects of nausea, diarrhea, etc. are not more frequent than from other forms of copaiba, if indeed they be as common. Mr. Hill speaks favorably of the oil of sandal-wood, but does not think it superior to copaiba. The following formula of Henderson is recommended in conditions not permitting the use of copaiba. Oil of sandal-wood, one ounce; rectified spirits of wine, two ounces; oil of cinnamon, twenty-five minims. Dose, one or two drachms three times a day.

SUICIDE BY SWALLOWING CHLOROFORM.—A case of suicide by swallowing an ounce of chloroform is reported in Australia, which presents some points of interest. The deceased man was

suffering from delirium tremens, brought on by a long course of drinking, and in this state procured and swallowed the chloroform. He immediately became insensible. His eyelids could be opened and pupils touched without the slightest proof of sensibility being manifested. When things were at the worst, and the man apparently dying, Mr. Gilbee and Dr. Neild, the medical men in attendance, determined to try the injection of ammonia, according to Professor Halford's plan of treating snake-bites. Ammonia, in the proportion of one part to two parts of water, was injected four times into the veins of the arms. Two drachms were injected altogether. The effects were most promising: sensibility returned, and after five hours the patient could sit up and talk. He died, however, suddenly next day, apparently from syncope. The brain was found to be highly congested, and smelled of alcohol. The liver was diseased.—*Med. Times and Gazette.*

EXTRACTUM CONII IN MASTITIS.—Dr. Allstadter (of Pesth) has found the use of this remedy valuable in preventing inflammation of the breasts of recently confined women as a consequence of over-distension of the milk-ducts.

The doses are to be repeated four or six times daily. Care is needed in the selection of the extract, as it is very variable in quality.—*Algem Med. Central Zeitung.*

CAMPHOR IN HOSPITAL GANGRENE.—Fifteen cases have been reported by M. Netter (*Gaz. Med. de Paris*), in which the administration of camphor has arrested the progress of hospital gangrene although the disease was very severe.

TORSION.—Dr. Duncan, of Glasgow, recently informed Dr. Fraser, of Montreal, that he had employed torsion twice on the femoral artery, and once in the brachial, successfully.

Book Notices.

A PRACTICAL TREATISE ON FRACTURES AND DISLOCATIONS. By FRANK HASTINGS HAMILTON, A. M., M. D., LL. D., Professor of the Practice of Surgery with Operations, in Bellevue Hospital Medical College, etc. etc. Fourth Edition, revised and improved. Illustrated with 322 cuts. 8vo. pp. 789. Philadelphia: Henry C. Lea. Cincinnati: R. Clarke & Co. 1871.

This, undoubtedly the best work on Fractures and Dislocations in the English language, has reached a fourth edition, showing the very high estimation in which it is held by the profession. The *Edinburgh Medical Journal* in speaking of it says: "In fullness of detail, simplicity of arrangement, and accuracy of description, this work stands unrivalled."

Among the improvements of the present edition are that discussions which occupied considerable space in former editions in regard to the value of certain specimens claiming to represent bony union after intra-capsular fractures of the neck of the femur have been omitted; many obsolete forms of apparatus have been excluded, and in their room more practical observations, and more efficient apparel which later experience has supplied has been introduced; nearly one-fourth of the whole number of illustrations has been changed, and in most cases by the substitution of original woodcuts, etc. etc.

The library of every physician who has to do much with fractures and dislocations should have this work in it.

THE MANAGEMENT OF INFANCY, PHYSIOLOGICAL AND MORAL. Intended chiefly for the Use of Parents. By ANDREW COMBE, M. D. Revised and edited by SIR JAMES CLARK, Bart., K. C. B., M. D., F. R. S., Physician-in-ordinary to the Queen. New York: D. Appleton & Co. Cincinnati: R. Clarke & Co. 12mo, pp. 300.

There is information in this little work calculated to enlighten any physician, although it has been prepared more particularly for parents. We hope the profession will encourage its circulation, for we feel assured that the facts contained in it, if studied, would diminish much the frightful mortality which occurs during the earlier periods of infantile life.

The distinguished editor, in his introduction, says: "I shared with him (Dr. Combe) the conviction, that the hope of diminishing the evil (infant mortality) rests *entirely* on the possibility of enlightening parents and the public on the causes of such mortality, and instructing them in the means of its prevention. For these reasons I felt that I was not unprepared for the task (revising and editing the work). Moreover, I had the feeling that I could not more usefully occupy my leisure, at the close of a long professional life, than in lending such aid as I could to carry out the benevolent intentions of the author; while I should, at the same time, have the gratification of paying a tribute of respect to the memory of a much esteemed friend.

CANCER: ITS CLASSIFICATION AND REMEDIES. By J. W. BRIGHT, M. D. Philadelphia: Published by S. W. BUTLER, M. D. 8vo, pp. 187.

The author states that in offering the following pages to the profession, his aim has been to place in their hands a work that will save them much labor and toil in collecting facts, and at the same time give a classification that will remove the difficulty of having so many names for the same form of cancer:

The contents of the work consist of an: *Introduction; Preliminary Observations; Treatment of Cancer by the most eminent Physicians and Surgeons; Tubercle; Cancer defined; Classification of Cancer; Preparation and Composition of Remedies and Record of cases; Views of various Authors; Sprouting Cauliflower Cancer; Landolf's method; Cancer of Internal Organs; Note on Cundurango.*

We have had little or no experience ourselves with cancer, but have always been in the habit of considering it a most fearful disease—a disease which, when an individual had once contracted, his fate was sealed; but our author seems to regard it as quite amenable to treatment, for he states on page 112, "Perhaps there is not one case in a thousand that does not commence as a local disease, and if properly treated in time may be cured." Again: "The great point to be attained in treating cancer is to remove every cell and diseased fibre. Having done this we are sure of a cure." In another place he states that in twenty years, since he has laid aside the use of the knife, he has not lost 10 per cent. of his patients, including those cases that were

too far advanced, when application was made to him, for any treatment to succeed.

As the author does not consider cancer a "blood disease" to be treated by constitutional remedies, we can not understand why he discards the knife and employs instead escharotics and other topical applications. The great principle of his treatment, as he says, is to remove every cancer cell, and how more effectually can that be done than by excision, if the operation extends sufficiently far beyond the diseased parts? During the first twenty-five years of his practice that he used the knife he is persuaded that he did not cure ten per cent. of the cancers he cut out, they reappearing in a greater or less length of time. But it seems to us that if the principles of his cure be correct, it must be that the want of success with the knife was because it was not used effectually.

The work is valuable in that besides containing the author's own experience, there is presented quite fully the views of very many eminent writers. In fact, it is an epitome of pretty much all that is known on the subject.

TRANSACTIONS OF THE INDIANA STATE MEDICAL SOCIETY. 1871. 8vo. pp. 250.

The Transactions of the Indiana State Medical Society of the present year come to us printed on tinted paper, bound in flexible covers, and presenting a very handsome appearance. The whole make-up of the volume certainly does great credit to the Secretary, Dr. G. V. Woolen, of Indianapolis.

The contents of the volume consist of, besides the transactions, constitution, by-laws, lists of permanent and honorary members, the address of the president, Dr. R. N. Todd, of Indianapolis, and the papers read before the Society, of which there were some sixteen; also a biographical sketch of the late Dr. John A. Bobbs, by Dr. G. W. Mears, of Indianapolis. Of course we have not had time to give the papers much attention, but from the reputation which most of the authors of them bear, we have no doubt of their ability.

The volume of the present year gives satisfactory evidence that the society is in a very flourishing condition.

An engraving of Dr. Bobbs forms the frontispiece.

Editorial.

CINCINNATI COLLEGE OF MEDICINE AND SURGERY.—At a recent meeting of the Board of Trustees of this institution, the vacancies in the Faculty made by the decease of Prof. Tallafarro last spring, and the resignation of Prof. Young from a Hospital rule that no member of the staff should engage in college teaching, have been filled. Dr. Thomas, of Covington, who, at a meeting of the Faculty, on a vote recommending him to the trustees for the position, received three votes to five in opposition, has been appointed to the chair of surgery;

Dr. Buckner has been transferred from the chair of physiology to the chair of ophthalmology; and Dr. Frederick Anderson fills the chair of physiology, made vacant by the transference of Dr. Buckner.

In consequence of two different announcements having been issued, and for other causes, reports have been spread abroad that dissensions and bickerings existed in the Faculty, a portion of the Trustees sympathizing with one party, another with another—that the college was about to go to pieces, etc. From what we can learn, and we

have endeavored to glean the facts in the case and nothing more, very considerable dissatisfaction was excited among the majority against the action of the Trustees in forcing Dr. Thomas upon them against their will; and in some sharp correspondence that took place between some of the Faculty and some of the Trustees, considerable reflection was made on Dr. Thomas' willingness to allow himself to be forced upon an unwilling Faculty. No one, however, has thought of resigning; and students can feel assured that the coming course of Lectures will, in no respect, be inferior to any previous ones. Those who labored for the Institution through good report and ill report at the sacrifice of their comfort, breaking up old friendships and making enemies to themselves, until they got it firmly planted on an equality with other schools, are not the men to abandon the fruits of their labors to strangers and to the old enemies of the school, who, now that it is prosperous, in spite of all their efforts to the contrary, would come in and take possession.

ABSORPTION OF SOLID SUBSTANCES INTO THE CIRCULATION.—

It is stated that Herbst believed he had satisfactorily demonstrated the absorption of milk and starch corpuscles into the chyle and blood-vessels; and his views were supported by the experiments of Bruch. Dondus and Menonides mingled charcoal with the food of rabbits, and found particles in the blood drawn from every region of the body. Similar researches, we learn, were undertaken by Marfels and Moleschott, who gave to frogs and dogs blood corpuscles from the choroid, and saw these corpuscles circulating in the web of the frog's foot.

Nearly thirty years ago, the *Lancet* says, Cesterlen administered unguentum hydrargyri to cats, and found molecules of the metal in their blood. Others, especially Voit, made a series of careful experiments, all showing that if blue ointment were vigorously rubbed

into the shaven skin of cats and dogs, minute particles might be found in other and more remote organs of the body, as the liver, spleen, pancreas, kidneys, etc. There have been, indeed, some experimenters who have only obtained negative results; but upon the whole, continues the *Lancet*, the evidence has been of late years strongly in favor of the possibility of the absorption of solid substances through the uninjured membranes and skin. Quite recently M. Heinrich Auspitz has given in the *Wiener Medizinischen Jahrbuchem* the results of his experiments on this interesting subject. He has employed a substance which, from its small specific weight and its strongly defined outline and stability, is quite as serviceable as metallic silver and coloring particles. This is rice-starch meal, which is furthermore easily recognizable by its reaction with iodine and the action of polarized light. The largest rice-starch grains are about twenty times larger than the red corpuscles of the rabbit, whilst the smallest are rather smaller than the red corpuscles. He injected white starch meal as well as starch meal colored blue with iodine. His first series of experiments consisted of injecting the starch powder into the external jugular vein, the vena cava inferior, and the pulmonary artery, with a view of testing how far it could be recognized when diffused through the tissues of the various organs of the body; and he obtained the general result that the presence of the granules could be almost everywhere easily demonstrated by the appropriate tests—as in the lungs, right heart, liver, spleen, kidneys and brain, and in hemorrhagic exudates. In subsequent experiments he injected starch molecules suspended in water into the abdominal cavity, and into the subcutaneous connective tissue; in other cases the starch was suspended in oil, and similarly injected; and finally, in another series of cases, the contents of the ductus thoracicus were carefully investigated after injection of

starch into the peritoneal cavity and into the subcutaneous connective tissue. The general results of all these the *Lancet* thus sums up:—Insoluble formed materials are undoubtedly capable of being absorbed both from the abdominal cavity and from the subcutaneous connective tissue into the circulation; they thus reach the lungs, and, passing through these organs, may enter into the systemic circulation. In order to gain entrance into the veins they traverse the lymphatic vascular system; but it is not yet accurately ascertained whether they enter the circulation exclusively by this route. The epidermis forms a serious but not insurmountable obstacle to absorption of starch-grains from the surface of the skin. All these processes of absorption are materially assisted by the presence of fat, which is absorbed still more readily than starch grains, and enters the circulation by the same path.

MICROSCOPY.—We learn from the *Record* that Dr. J. G. Richardson, at a stated meeting of the Biological and Microscopical Section of the Academy of Natural Sciences of Philadelphia, exhibited several slides of microscopic objects mounted in a saturated solution of acetate of potash, as recommended by Max Schultze, and desired further to ask the attention of the Section to this new and valuable preservative menstruum. He stated that, according to his experience, confirmatory of that recorded by previous observers, it possessed great advantages, especially for beginners in microscopy. . . . The specimens exhibited comprised one of blood, three weeks old, showing clearly the leucocytes and red blood discs--the latter, although flattened, were not cunated, and retained a large proportion of their coloring matter; one of tube casts from the urine of Bright's disease, containing fatty epithelial cells; one of a specimen of croupous (fibro-corpuseular) lymph stained with carmine, containing well defined leucocytes; one of a thin section from a fibromatous tumor;

one of crystals of uric acid, which had been slightly granular when mounted, but showed no further deterioration during the following two weeks.

In reply to a question Dr. R. stated that the solution employed was made by simply dissolving an avoirdupois ounce of the dry acetate of potash (as sold by all druggists) in a half a fluid ounce of river water, and allowing it to become clear by standing a day or two.

THE MEDICAL REGISTER AND DIRECTORY OF THE UNITED STATES will shortly be issued by Dr. J. M. Toner, of Washington, and will include the names of 50,000 physicians. It will, moreover, contain statistics relating to all the medical schools, hospitals, medical societies, and institutions.

HALF-YEARLY COMPENDIUM OF MEDICAL SCIENCE.—We have received the July number, 1871, of this excellent half yearly. We have quite a number of times brought it before the attention of our readers; and we hope that the most of them are subscribers of it. The present number is fully up in merits to any of the past, if not superior.

Published at Philadelphia by Dr. S. W. Butler, at \$3 a-year--very cheap, for each half-yearly number contains nearly 300 pages of the cream of medical literature, domestic and foreign.

CONCENTRATED EXTRACT OF PINUS CANADENSIS.—We desire to draw the attention of our subscribers to this medicine. We have used it ourself, and regard it the best astringent with which we are acquainted. In hemorrhoids, in some affections of the vagina, as a topical agent, we believe it to be unequalled. In the *Medical Gazette* of June 24th, Dr. J. Marion Sims speaks of it in the highest terms; and from the experience we have had with it ourself, and from reports of its efficacy by physicians of this city, we have no hesitation in indorsing all that he says about it. See advertisement.

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CIMICIFUGA IN SUBSTANCE IN TREATMENT OF CHOREA— WITH CASE.

By THAD. A. REAMY, M. D. Professor of Obstetrics in Medical
College of Ohio.

M. B. R., a girl aged 13 years, well developed, florid complexion, but not full habit, muscles firm; lived in country, and accustomed to much exercise in the open air. Health previously perfect. Had never menstruated. Was attacked Feb. 20, 1852, with chorea. The disease commenced gradually, manifesting itself by irregular involuntary movements, first of the right arm and hand, then muscles of the face, then the lower extremities, gradually increasing until at the end of six weeks the patient was in a pitiable condition indeed, having lost the power of speech, swallowing either solids or fluids with great difficulty, and finding but a few hours of sleep in each twenty-four, therefore rapidly approaching exhaustion. During all this time she had been under most competent medical care, a faithful and intelligent family physician, who also enjoyed the frequent counsels of a neighboring practitioner.

Aloetic purges, warm and cold baths, electricity, iron, quinine, Indian hemp, sulph. ether, valerian, camphor, whisky, in short, the catalogue of remedies had been tried faithfully. At this stage of the case the muscular violence was astonishing, occasionally the thighs would flex upon the abdomen, and thus in a sitting posture she would spin around like a top, on the bed; and at times, the trunk and limbs assuming a hoop form, the patient would roll over the floor with rapidity.

Eight weeks had now passed since the attack commenced. Great prostration and emaciation were present; food and drinks

were taken with still greater difficulty. The muscular contractions appeared to involve every muscle in the body. Sleep only came to her relief at twelve to two o'clock at night, lasting from one to two hours, during which time, however, true to general experience in this disease, all muscular activity ceased, the child lying pale, anæmic, exhausted. An unfavorable prognosis was given on all hands. The little sufferer was a near relative of mine, and, as I had entered upon my third year of medical pupilage, I read every thing I could find upon the disease. The sanguine statements made by Dr. Young, of Chester county, Pa. and quoted by several writers, Wood among others, as to the wonderful remedial powers of *cimicifuga*, given in substance, led me to request of the attending physician that the article be tried, and my request was most cordially granted. Repairing to the woods on my father's farm, a supply of fresh root was obtained, partially dried by artificial heat, grated and administered in teaspoonful doses four times daily. At first, owing to great difficulty in swallowing, and violent persistent muscular spasm, the amount taken could not of course be accurate. On the second day, however, she swallowed better; on the third quite well, and the muscular movements were quite moderated. On the evening of the fourth day not a muscular spasm remained. She who had been tossed and tortured for two months was tranquil. But the anæmia and exhaustion, now fully unmasked, were alarming. Endocardial murmurs were quite detectable. These symptoms, however, under the use of iron, quinine, generous diet, and open air exercise, soon vanished, and the bloom of health returned. She did not menstruate till one year after recovery, when the function was established naturally, without any disturbance.

The patient has never suffered a return of the disease; is now the mother of several children. Has had two attacks of articular rheumatism,—the first six years after recovery from chorea.

The duration of the case above cited, the remedies employed, the magic promptness with which recovery followed the administration of *cimicifuga*; finally, the well known fact that in a vast majority of cases, patients, other than those in whom the disease is congenital, recover under almost all forms of treatment, and under no treatment at all, point strongly to the possibility that the case here may have been spontaneous, or a mere coincidence, with the administration of the drug. Such may

have been the fact. Chorea is certainly no exception to the remark, that we are often void of absolute proof as to the precise relation between our therapeutics and recovery from disease.

Nevertheless, I was at the time charmed with what in my enthusiasm I regarded as a cure, perhaps all the more because this was my first patient. And in the light now of nearly twenty years' experience, during which many cases of chorea have been treated with *cimicifuga* as the leading article, I am still confident that it is one of the most efficient agents at our command. In several cases all trace of the disease has fled within five to eight days after treatment was commenced. And I am persuaded that in the case reported the life of the patient was saved by the remedy.

Let it not be understood that I consider *cimicifuga* a specific for this disease. I do not recognize such agents, nor would I consider its empirical administration, during all stages of each case, to indicate competency, much less skill or science, in the author of such practice.

All cases of disease are treated by the intelligent physician on general principles, so far at least as general principles can be comprehended in their relations to the special case in hand. But there are many diseases in which our practice is necessarily, in the present state of knowledge, guided by experience and observation. True, we can generally obtain light enough, purely scientific, to inspire us and lead us onward enthusiastically, and it is well; but we must, in many cases, still grope in the dark, and not refuse good results simply because we cannot tell *scientifically* why they are obtained. These remarks apply to chorea. Its general habits are well known, but up to the present moment its causation and nature are unknown. Much has been written as to its connection with rheumatism, either as an antecedent or succedent.

Begbee, M. Sec, M. Botrel, and others have shown that it is quite frequently found in rheumatic patients. Botrel says its physiological cause is to be found in rheumatism of the nervous centers. Nest and Hillier regard rheumatism as the strongest predisposing cause. Hughs shows that in many cases there is found endo-carditis, in others peri-carditis. Kirk thinks that the disease is generally associated with endo-carditis, and follows impressions and changes in the brain resulting therefrom.

That the disease is often associated, and in the relation of cause and effect, with cardiac disease, rheumatism, anæmia, menstrual derangements, etc. etc. all are pretty well agreed. But that it is at all uniform in any of these relations I do not believe. No matter which, or whether either of these conditions be present, however, most competent physiologists conclude that the impressions resulting in choreic movements are made upon the central cerebral ganglia. And this may possibly be the key-note to the influence of cimicifuga over the disease, as the agent is well known to have powerful action upon the brain, in full doses. Most advocates of the remedy, however, attribute its good effects chiefly to its well known anti-rheumatic properties.

But I did not take up my pen to write upon the cause, nature, pathology, symptoms, or clinical history of chorea, but simply to add my testimony, founded upon considerable experience, to the unquestioned value of a therapeutic agent in the management of a most troublesome malady; an agent which has several times been warmly commended to the profession by highly competent authority, but which I notice is mentioned only in the most incidental way by two of the most recent and reputable books, one foreign, the other American. This fact, and a growing impression in my mind that our experiences and observations, as practitioners, especially those of us who are growing old in the service, should be freely interchanged, is my apology for this very hastily written paper.

THE NATURE OF PULMONARY TUBERCULOSIS.

By A. P. DUTCHER, M. D., of Cleveland, Ohio.

Numerous theories are entertained on the nature of this disease by modern pathologists; but not one of them has passed the ordeal of criticism unharmed. They all have weak points, which, when put to the test of rigid scrutiny, are found wanting. The reason for this is, that many of our medical philosophers have fallen into an error bequeathed to the science of medicine by the fathers of antiquity—that of first framing their theories and then bending their facts to suit them. This is reversing

the order of reason. It distorts and obscures her teachings by giving place to falsehood, prejudice and partizan bigotry, which is greatly to be deplored in medical science, as it stands directly in the way of improvement and advancement.

We hold it a cardinal doctrine in our professional creed, that those who worship at the shrine of science should dismiss from their minds all dishonesty and bigotry. If an individual attempts to explore the field of knowledge with the spirit of a bigot or partizan, suffering a cloud of desires and aversions to hang around his understanding, he will never discern objects clearly; his mind will be confused by the mists of error, and the light of truth, if seen at all, will only bewilder, and render his way uncertain and difficult.

Our duty is to inquire what is true, not what is the finest theory. We should not allow ourselves to be bound by the opinions of others; we should think for ourselves, freely and independently. We need not fear the result of free investigation; it is the coward who shuns examination, and cannot look the truth full in the face. Reason and free inquiry are the effectual antidotes to error. Give them free scope, and they will uphold truth by bringing false opinions, and all the spurious offsprings of ignorance, prejudice and self-interest before their severe tribunal; subjecting them to the test of close investigation, the murky clouds of error will flee before the brilliant light of science.

I.—THE INFLAMMATORY THEORY OF THE NATURE OF TUBERCLE.

The advocates of this theory of the origin of tubercle maintain that the principal feature of this disease is inflammation, or *arteriality*. Dr. Williams, in his *Principles of Medicine*, says that tubercular matter may be found within the blood-vessels themselves, as he has repeatedly found something presenting all the external appearance of yellow tubercle in the blood-vessels of parts remote from the lungs; and he contends "that where fibrin may coagulate, there its degraded form, tubercle, may occur."

Rokitansky, in his *Manual of Pathology*, has labored diligently to prove that tubercle is a modification of fibrin. "Arterial elaboration of fibrin," he says, "constitutes, above all, the cardinal feature of the tubercular *crasis*." He also maintains that

in consequence of the alteration of the nature of fibrin, tubercle is continually deposited, even when the blood is very deficient in that constituent. All the fibrin that is formed is soon affected by the peculiar dyscrasia, and is thrown out in the form of tubercle. The rapid coagulation of tubercle-blastema, which must be effused in a fluid form, its tendency, when coagulated, to soften—its formation being favored by active arteriaization, and prevented by a venous condition of the blood—are circumstances which he regards as highly indicative of a real affinity between tubercle and fibrin.

It is a notorious fact that tubercles are often found in the lungs and other organs without their having manifested any symptoms of their existence during life. It is also true that, if they have not passed to the crude state, the tissues around them are often perfectly healthy, presenting no trace of pneumonitis. Could the pulmonary tissue maintain this integrity if each tubercle was the centre of inflammatory action? Inflammation appears, therefore, to be rather a consequence than a cause of tubercles; the latter forming independently of it, and subsequently inducing phlogosis, like other extraneous bodies.

Laennec, in writing on the origin of tubercles, says: "From all that has gone before, we are authorized to conclude that tubercles are not the product of inflammation of any one of the constituent tissues of the body. On the contrary, a multitude of facts prove that the development of tubercle is the result of a general condition of the system; that it takes place without previous inflammation; and that when inflammation coincides with tuberculous affections, it is most frequently posterior to its origin."

Dr. Carswell rejects the inflammatory theory. He maintains that tubercles in the lungs are a deposit directly from the blood. He reasons thus: "The products of inflammation are coagulable lymph and pus. When, therefore, other products than these are present in inflammation, the conclusion to be drawn from these circumstances is, that there exists some other morbid condition than inflammation, and that to this condition alone should be ascribed the distinctive and essential character of the product. Where the tuberculous disposition exists, inflammation or any irritation may attract it to a particular organ. Examples of this present themselves in inflammation of the sub-cutaneous

glands of the neck and kidneys, which may become tuberculous from the same cause."

Dr. Campbell, in his excellent work on *Pulmonary Consumption*, also discards the inflammatory theory. He gives it as his opinion, that the blood becomes charged with particles derived from the materials of nutrition, which, being carried forward to the lungs, are capable, in some organizations, of passing through their extreme vessels, and hence produce no effect, but which in other cases are retained in the capillaries, and thus, by gradual accumulation, form masses apparently homogeneous, to which we apply the name tubercle:

Schroder Van der Kolk regards the masses here described by Dr. Campbell as filling the air-cells and making up the tubercles, nothing else than epithelial cells, which swell by imbibition of plastic matter, enlarge, and are detached from the wall of the air-vesicle, and are in no way depending upon a morbid material for their origin—tubercles being nothing but blighted epithelial cells.

Dr. Felix von Niemeyer, in his clinical lectures on *Pulmonary Phthisis*, contends for a kind of mixed theory, in which inflammation plays a very important part. He does not regard the disease as constitutional, yet in places he speaks of dyscrasæ, and tells us that "the great danger for most phthisical patients is, that they may become tuberculous." He says it is well known that many of the lesions which are attributed to tubercle are really the consequence of pneumonia, either acute or chronic, or of bronchial hemorrhage; and no form of pneumonia is so likely to be followed by phthisis as that characterized by the excessive production of cells, known as catarrhal pneumonia, so called by him to contradistinguish it from Rokitansky's croupal pneumonia.

Niemeyer further maintains that although phthisis generally takes its origin from catarrhal pneumonia, it occasionally arises from the croupal; that the product of the inflammation undergoes what is known as the caseous degeneration, and hence gives rise to the caseous masses in the lungs which are generally mistaken for softened tubercle; that frequently in the lungs of those that have been pronounced phthisical, not a single tubercle has been found. The disease of the lungs characterized by this caseous degeneration is called by him phthisis, to distinguish it from that

in which a deposit of miliary tubercles takes place—which is true pulmonary tuberculosis. He therefore announces the following theory: *Tuberculosis, in most cases, is a secondary disease, arising in a manner not known to us, through the influence of caseous morbid products on the organism.*

Billroth, in his *Surgical Pathology*, under the head of tuberculosis remarks: "The division of tubercles into miliary gray points and into cheesy nodules, the very peculiar acute miliary tuberculosis, the connection of tuberculosis with other and especially with chronic suppurative inflammation, and those tending to caseous degeneration, were gradually developed, and in many places remained obscure, although the idea of tubercle has been rendered more limited and precise by Virchow, so that at present every new formation that has undergone caseous degeneration is not considered tubercle. It was reserved for Buhl, by careful experiment, to arrive at the idea that acute miliary tuberculosis was the proper type of tubercular disease; he found it always combined with old caseous or purulent inflammation foci; he made the bold assertion that it always resulted from absorption of substances from these foci. According to this, tuberculosis was an infectious disease, a sort of nodular exanthema on and in internal organs, caused by the absorption of injurious substances, particularly from old caseous points of inflammation in the lymphatic glands, lungs, bone, etc. Investigations of late years have shown that many destructions—in the lungs for instance—which previously had been considered due to miliary tuberculosis as a matter of course, are inspissated, caseous, and partly softened spots, that must be regarded as the result of a simple chronic ulcerative inflammation."

The doctrine of the inflammatory origin of tubercle, has of late been gaining ground among German pathologists. In England and this country, although at one time very popular, it is now ignored by our best physicians. All the physical signs and general symptoms, with the attending pulmonary lesions, are so different from pneumonitis, that very little need be said in review of the subject.

1. Pneumonitis is a self limited disease, it tends to recovery; pulmonary tuberculosis is not.
2. Pneumonitis is confined chiefly to the inferior lobes of the lungs; tuberculosis to the superior lobes.

3. Pneumonitis seldom results in suppurating cavities; softening tubercles uniformly leave vomica.
4. Pneumonitis has no specific microscopical element; tuberculosis has—the *tubercle cells*.
5. Pneumonitis never results in the formation of caseous matter; in pulmonary tuberculosis they are common, being composed of *aggregated tubercle*, and some of the ordinary products of inflammation.

It is maintained by most of the writers who advocate the doctrine of the inflammatory origin of tubercle, that these caseous masses are often found in the lungs unaccompanied by a single miliary tubercle. This no doubt is often the case, but when any one will show me a caseous mass, taken from the lungs of an individual, who during life has manifested marked symptoms of phthisis, that does not contain tubercle cells, then I will embrace the theory of the inflammatory origin of pulmonary tuberculosis.

In our first chapter we described two varieties of tubercle, the *miliary* and the *yellow* or *aggregated*,—the caseous masses of Niemeyer. Now it is not uncommon to find both of these varieties in the same lung. I was recently present at the post mortem of a young man, where the superior lobe of the right lung contained a large mass of aggregated tubercle surrounded by a vast number of miliary tubercles. The middle lobe of the same lung contained many miliary tubercles. The inferior lobe gave evidence of recent inflammatory induration. In the superior lobe of the left lung there was a large number of miliary tubercles. The inferior lobe was congested, but manifested no marks of recent inflammatory action. In the left kidney there was a large mass of aggregated tubercles going through the process of softening. The peritoneum was studded with a vast number of miliary tubercles, while many of the mesenteric glands were occupied by large masses of aggregated tubercle. The prostate gland was completely infiltrated with tubercle. A large mass of tubercle was firmly imbedded in the spleen. The liver was somewhat fatty, and contained several large masses of aggregated tubercle. The mucous membrane of the stomach and small intestines was softened in several places; in the larger intestines there were several ulcers of tubercular origin. The heart was very small, but otherwise healthy. Emaciation of the general system was extreme.

Now what is the significance of this wide-spreading tubercular

devastation? Is any one so blinded by the inflammatory theory of the origin of tuberculosis as to suppose for one moment, that the individual had inflammation at all of the locations where tubercle was found. This idea would be absurd, contrary to every pathological principle that presides in the case. The rationale of the whole matter is this: *Tubercle first—inflammation its sequence.*

II.—IMPERFECT NUTRITION.

This theory of the origin of pulmonary tuberculosis is based upon the supposition that the disorder commences primarily in the organs of digestion. Certain lesions are said to occur here that interfere with the proper digestion of the food, and lead ultimately to the formation of the morbid matter in question. What the precise trouble is the advocates of this theory are not agreed. Some trace it to a want of gastric juice, others to an excess of acid in the stomach, others to a depraved condition of the bile and pancreatic juice. Dr. Bennett is an ardent advocate of the acid theory. He contends that pulmonary tuberculosis arises directly from excess of acid in the stomach and bowels, which interferes with healthy digestion, so as to give a preponderance to the albumen, and as a result there will be a deficiency of oil, which in connection with albumen is essential to healthy nutrition, and as a consequence elementary molecules and nuclei are not formed, hence abortive cell-growth; and in this way are constituted tubercular corpuscles, which form the local lesion of phthisis pulmonalis.

Dr. Bennet, in his work on *Pulmonary Tuberculosis*, page 30, says: "One of the great difficulties in the pathology of phthisis, as now brought forward, consists in the fact whilst little fatty food enters into the economy by the primary digestion, and the adipose tissues of the body disappear, fat is apt to be stowed away in certain organs as the result of secondary deposition, especially in the liver. This fact, however, only proves that the formation of fat by the secondary digestion, and as a secretion of certain organs, like the liver and female mamma, are excretory products, and as such are, *per se*, incapable of being reabsorbed or of affording nutrition. In short such fat must undergo those changes and that elaboration which the digestive functions produce, before it can be available for the formation of good

blood, which, in its turn, is only a preliminary step to healthy nutrition."

There is every reason to believe, however, that the various fatty compounds are convertible into one another—that fat, for instance, introduced into the alimentary canal, or formed from the starchy and saccharine parts of the food, are through elaboration transformed into the fat of the liver, cholesterine, margarine, butter, etc., in which condition they constitute products to be excreted. But that these, introduced into the alimentary canal, acted upon by the juices of its various glands, and farther changed by the blood glands, may be resolved into elements capable of nutrition. The true chemistry and effect of vital changes on the fatty compounds, however, have yet in a great measure to be worked out by micro-chemical research. In the meantime we may conclude with certainty :

1. That an oily emulsion must be formed to constitute proper chyle to be converted into blood.
2. That in pulmonary and other forms of tuberculosis the process is interfered with ; so that.
3. A depraved state of the constitution is induced favorable to the deposit of tubercular exudation into the various tissues, but especially into the pulmonary.

Several years since Dr. Hutchinson published in the London *Medical Times and Gazette*, a very elaborate article to prove that indigestion was often a precursor of tuberculosis. He presents a table of fifty-six cases of phthisis, in which he ascertained the state of the digestive organs prior to the beginning of the symptoms of the local disease in the lungs. After stating that in a large majority of cases, pulmonary tuberculosis is associated with indigestion, characterized especially by difficulty in the assimilation of fatty aliment, the author proceeds to describe that form which precedes the development of phthisis. Out of fifty-two patients who manifested marked symptoms of indigestion, the stomach trouble preceded the pulmonary disease in thirty-three. The special symptoms manifested in these cases were similar to those in the confirmed examples, namely, a distaste for fat, oils, and sugar. It was also further added that, in forty-eight per cent. of the cases, a dislike for fat had existed throughout life. It was also remarked as another characteristic feature,

that acidity, manifested in eructations, occurred in a large proportion of cases.

Dr. Hutchinson does not, however, consider every form of indigestion as producing pulmonary tuberculosis. He thinks that it is confined mostly to that variety in which there is a dislike and rejection of hydro-carbonaceous food, and the production of an increased amount of acid; but finally concludes with the statement, "that indigestion is a mere link in the chain, and that the tubercular dyscrasia may be produced without any intervening stage of indigestion." But notwithstanding his admission, he immediately adds, "that the tubercular dyscrasia consists, essentially, in a morbid state of the nutritive fluid, which state might be just as efficiently produced by a withholding of the proper articles of food, as by a refusal, on the part of the organs of digestion, to assimilate them."

Dr. Edward Smith, in his book on *Consumption, its Early and Remedial Stages*, says: page 51, "There is commonly some derangement of the functions of digestion, but it is frequently small, and in such cases is not important. The evidence which we would adduce in support of this proposition are that the tongue is more or less discolored, or loaded with a buff colored coat, and presents enlarged and projecting papillæ, and is not unfrequently large and flabby. Also that there is a sense of oppression after meals, and tenderness over the epigastrium on pressure, at most periods of the day; a sour taste in the mouth, and flatulency. These conditions are more commonly found with the lymphatic temperament, whilst in many of the sanguineo-nervous temperament the tongue retains its usual size and color, and remains clean. It is very frequently in dressmakers, tailors, shoe-makers, and others of a sedentary occupation; in printers and others living in foul air, and engaged in night work; and in the poor, who live chiefly upon bread, potatoes, and tea; and in all such instances it is a prominent symptom, and demands prime attention. In a majority of such cases there is an intolerance of fat, and occasionally we have met with instances in which fat caused pain at the stomach."

That the human system is not well nourished in pulmonary phthisis, is a fact which cannot be denied. The external evidence of this is too palpable. That mal-assimilation should constitute one of the cardinal features of the disorder is not to be wondered

at. The degeneration and wasting away of all the tissues of the body bear ample testimony on this point. But that this mal-assimilation is the original cause of pulmonary tuberculosis, we most seriously doubt. Individuals are often very poorly nourished, and their diet may be very meager for months or even years, yet they suffer not from tuberculosis. It takes something more than a want of assimilation of fat to produce this wasting disease; although animal food appears to be necessary, in most cases, for the enjoyment of perfect nutrition, yet, we often see persons who are perfectly nourished without it, and are free from tuberculosis. A want of nourishment, however, in an individual who has a proclivity to phthisis pulmonalis, may, like any other debilitating cause, lead to its development, but never can be a primary or originating cause; it does not account for its nature. "Indeed," says Dr. Lawson, "when we witness, as is often the case, the most inveterate and protracted cases of dyspepsia, running, it may be, through the great part of a life time, failing to induce phthisis, it must be acknowledged that this cause, *per se*, is often inadequate to induce the disease. And further, when we find tubercular deposits a *congenital* disease, it must be admitted that the digestive organs are not the only source of the morbid condition. In such examples, primary digestion could have had no agency in the production of the disease, and the same is equally true of most cases occurring in early infancy."*

III. DEFECTIVE RESPIRATION.

This theory of pulmonary tuberculosis has a few able advocates, among whom we may mention Dr. Edward Smith, one of the consulting physicians to the Hospital for Consumptives and Diseases of the Chest, Brompton, London. In the January number of the *American Journal of the Medical Sciences* for 1862, page 84, he advances the following on the origin of tubercles in the lungs: "Thus I have endeavored to show that the earliest indications of phthisis is the lessened action of the air-cells, and it is highly probable that this is commonly associated with, or resulting from, depressing agencies. We all know in our own person the temporary effect of depressing causes, as grief or disquietude of any kind, over the action of the lungs, and have observed the slow respiration followed by long sighs or yawns,

* Lawson's Phthisis Pulmonalis, page 150.

possibly indicating the accumulation of carbonic acid in the air-cells of the lungs from the previous incomplete respiration. Moreover, as the function of respiration is so important and so unceasing, and as the air-cells are of a delicate organization, it is quite clear that they must be highly endowed with nervous influence from the cerebro-spinal, excito-motory, and sympathetic system, and consequently be extremely liable to their special diseases. As they have the power of extension and retraction, that power may be modified both toward decrease as well as increase, and they are of a delicate organization, and so endowed with nervous influence, it is certain that they will both sympathize greatly with the nervous system, and be greatly influenced by it, and also be liable to their special diseases, arising more or less from local causes only. Thus the lessened action which constitutes or leads phthisis may be either general or local; and whilst admitting that the multiplication of causes point to a general action, we must not ignore the possibility of their being due to local causes only.

"I am anxious to refer to this, for we have each of us seen cases which appeared to us to have arisen from some local cause, as some prior local disease; but the prevailing notion of the general and blood origin of phthisis has led us to throw doubts over the correctness of our belief. Without venturing an assertion on a subject about which so little is known, I would take courage to ask if there are not grounds to believe that acute phthisis is the local, as contrasted with chronic, phthisis, which is the more general form of the disease? Upon this point I would not dwell, but I feel convinced that a wide field for inquiry is yet uncultivated in the disease of the air cells of the lungs, and that whilst we may not give too much attention to the mere condition of the air, we have given too little to the all-important air-vessels.

"That the lessened action of the air cells to which I have referred, as an evidence of phthisis, is exclusively restricted to this disease, I dare not venture to affirm. In many cases of chronic bronchitis there is lessened vesicular murmur, and lessened resonance on percussion, both due, in some degree, to the same cause, as in phthisis. Whenever, however, there is lessened vesicular murmur, with lessened mobility, and both flattening and atrophy, and at that early period short and feeble inspiration.

with lessened quantity of admitted air, we may safely affirm that to be a case prone to tubercle."

Dr. Smith maintains further, that all these physical signs may be present prior to the tubercular deposits in the lungs. Lessened resonance on percussion, lessened vesicular murmur, lessened mobility, flattening and atrophy, why these all belong to an advance stage of the disease; they are all characteristic of extensive tubercular consolidation. If such physical signs exist previous to local deposit of tubercle in the lungs, then we have studied the art of percussion and auscultation in vain. If these are present during the pre-tubercular stage, they are so obscure that no one has ever had the good fortune to discover them but Dr. Smith, and as means of detecting the disorder at this early period, to the general practitioner, they cannot be of the least use in making out a diagnosis. Dr. Smith says, that when these signs are present "we may safely affirm that to be a case prone to tubercle." Surely it is not only prone to tubercle, but tubercles already exist. They are interfering with the expansion movements of the chest; they lessen if they do not extinguish the vesicular murmur, and render the chest exceeding dull on percussion. What more do we want to make out a case of tubercular consolidation, or some other hardening of the pulmonary structures.

If this theory of pulmonary tuberculosis be true, then all those diseases of the chest which impair the respiratory movements would be greatly productive of it; thus valvular obstructions of the heart, pneumonitis, pleuritis, and bronchitis, would be common causes of the disorder. But this has never been demonstrated. Indeed, our best writers do not consider either of these troubles a cause of phthisis. They no doubt often hasten the development of the disease in individuals predisposed to it. The theory of defective respiration, as the origin of tubercles in the lungs, therefore, rest upon a very poor foundation. Indeed, it is imagined by some of our medical philosophers, that pulmonary tuberculosis is caused by over activity of the functions of the lungs—too rapid oxygenation of the blood; and to remedy this, is to restrain their activity by increasing the venosity of the blood, all of which is ignored by those who advocate the defective respiration theory. From the present state of our knowledge on this subject, we feel free to say, that there is no

demonstrable evidence to prove that either defective respiration or even a vitiated atmosphere can originate pulmonary tuberculosis.

(Concluded in December number.)

CINCINNATI COLLEGE OF MEDICINE AND SURGERY. THIRTY-FIRST ANNUAL SESSION.

Introductory by M. L. AMICK, M. D., Demonstrator of Anatomy.

Man has been called the "great priest and interpreter of Nature," and science defined as its right interpretation.

But the true interpretation of nature is a slow and difficult work, since our knowledge emanates with experience, and our experiments are the magnifiers of our knowledge, the results of legitimate observation whereby one truth after another is added to the scroll of scientific investigation.

The past has been more speculative and less experimentative than the present, and hence we find the ancients were ignorant, in many respects, with regard to natural phenomena and the laws by which they are governed, overlooking as they did the true connection between cause and effect.

Ancient philosophy abounded in beautiful and enticing arguments regarding natural phenomena, attracting the attention of even the most ignorant, but their reasonings were based on *a priori* assumption of a cause, and not upon an inductive inquiry proven by the tests of experiments.

They were full of abstract speculative theories, with unfounded inferences and superstitious motives. But these derelictions of blind faith could not long prevail, when by experimentation the truths of physical science became known.

The secrets of the laws of nature are being unlocked by the keys of observation and experiment. True, at first, questions were put at random and answered vaguely, but with increasing experience questions are put more sharply, and go deeper, eliciting clearer explanations and better understanding, driving away the submissive superstitions, and permitting us to grow more perfect in our understanding and comprehension of many subjects, until accuracy has created the subject a science capable of being proven with mathematical certainty to persons of suitable intelligences.

Purely intellectual or theoretical knowledge is different in character from that which results from experiment and observation. A blind Milton could think and reason well; but a child, born and raised in a dungeon, might, after a long period of time, reason out for itself the simple truths of mathematics by proceeding from its simple notions of space and number, of which man cannot divest himself unless he cease to think; but it never could tell what would become of a lump of sugar if immersed in water, or the result of mixing different colors.

But the observation of facts, that lead from intricacy to intricacy, reveals to our doubting minds the knowledge of physical laws, and enables us by a combination of these facts, together with a combination of these laws, to foretell the result of this actual combination of laws, and assign reasons to them, though humanity would doubt, without even the predilections of free inquiry.

Even when Le Verrier had calculated for the very spot from whence emanated the cause of the perturbations of the planet Uranus, he himself could scarcely believe the correctness of his own theory, until the German astronomer turned his great telescope to the place and there beheld the new planet, and then announced to the world that the stupendous prediction was verified by observation. Though true as the mathematical calculation was, without observation it never would have been accepted as positive, not even by Le Verrier himself.

Science then may be said to be the most perfect knowledge of Nature in all her aspects, or, according to the Roman orator, "*Cognitio certa ex principiis certis exorta*," certain knowledge from certain principles deduced.

The dark and dreary days of fanaticism have long since ceased to be, and empiricism is quietly being discarded, while we call to our aid positive demonstrations, experiments and natural observations, and thereby connect all sciences as mutual colaborers to one and the same great end.

From this combination harmony displays itself, and demands that the physician's greatness be based upon exact anatomy and physiology, while auxiliary to, and supporting, are the natural sciences in general.

To be a physician of eminence, one should be a chemist, in order that he may be able to compound medicines without form-

ing a fatal mixture, thoroughly understanding the reciprocal actions of bodies when reduced to their atomic conditions, knowing their general as well as special physical properties, and the numerous special and peculiar properties when different kinds of matter are brought together. If the earth afforded but one kind of matter, as iron or sulphur, we would still have a science of chemistry.

Mathematics, though the simplest and least dependent of all the sciences, is essentially requisite, as we are constantly dealing with numbers and combination of numbers. In our description of the human body we constantly employ geometry in describing the planes, surfaces and angles of the different structures.

Astronomy, which studies the heavenly bodies as they revolve in space, and estimates by the aid of numbers the laws their movements are governed by, should be partially understood by the student of medicine, as minute movements of the heavenly bodies are in a correlative degree beautiful magnifiers of the minute movements of the human body.

Geology, or that science which studies the surface of the globe and the successive strata which are met with in its interior, that goes far beyond all historical tradition, brings to light as it were the very depths of earth, and traces with a sure hand the history of the globe and the revolutions it has undergone, should be equally as important to the student of medicine, for from mother earth we derive the most important decorations of our medical category, which we use when we go forth to meet the fell destroyer. So also physics, properly so called, or the study of the properties of matter in general, in aid of which experiments are performed in order to exhibit phenomena in every possible light, going from the ideas of number to those of the objects numbered, from the notion of space to that which occupies space, from the conception of force and matter to their essential properties, until this general relation establishes an order of co-existences, whose actions are the sequences, and this combination forms a bulwark that gives solidity to the science of medicine.

Dealing with mind as well as body implies that your attention should be directed to psychology, that you may be able to grasp that greatest of human embodiments and fathom its depths, and then portray its action in a phantasmagora, as it were, before

your sight of conception, that you may be better able to administer the restoring balm.

Indeed the physician of the future should be a man who is a chemist in the laboratory, a physiologist in the museum, a geologist in the cabinet, a biologist in his study of life, and a cosmologist in his study of the inorganic world; a sociologist that he may fully comprehend the relations of men to each other; a theologian, that he may realize the workings of Divinity before whose shrine all must kneel, for as medicine is fast approaching the topmost stone of the colosseums of science, so must its standard bearers strive to occupy the heights to which the demands of time have elevated it.

But before closing let me call your attention to one of the great secrets of success in the study of medicine; whether classically educated or not, you have to learn the nomenclature or technicalities of your profession, for here is the very foundation stone upon which to build.

This is the first and most essential element in the knowledge of your profession. Understanding the technicalities and history of nomenclature gives you a clearer and more comprehensive knowledge of the parts contemplated and alluded to, either by association, comparison or unity; and a thorough understanding of the ideas of the fathers of medicine must be inculcated that you may grasp the first and most beautiful tenets of your professions.

The Latin language is the mother of our profession in the nomenclature of medical science. The first writings are ascribed to the Greeks, but the Latin is the accepted origin of most of our medical literature; and thus, when we adhere strictly to the mother tongue, a prescription written in Latin would be equally understood the world over, whether laid before the Frenchman, German or American. It would be far better for our profession if all contributions to medical science were written in Latin, giving unto world and profession but one medical language.

Here is the foundation stone of the geologist, ophthalmologist, and linguist, but if the students of medicine have not this foundation, they are like the battalion that had magnificent cannon and foaming chargers, and skilled commanders, and when the battle trumpet sounded they rushed heroically to the front and brought their cannons to bear upon the enemy, the gilded balls

of steel rolled to their mouths, when lo the splendid phalanx stood still, gazing with staring countenances and shrinking horror, for they had no powder, and consequently were soon captured.

The Latin and Greek is your powder, be careful to possess enough of it to give you a thorough understanding of the technicalities of your profession. When your life is in danger from disease or injury sustained, would you suffer a pretender to medical or surgical science to approach your couch and administer to you? If you had a hundred thousand dollar estate entangled in the meshes of the law, would you permit an illegitimate son of Blackstone to mismanage it? If you were going to erect an edifice worth half a million, would you not secure the services of the best architects, whose experience in building and knowledge of the materials were of the most perfect kind.

It has been and is argued by prominent members of the profession, that the student of the collateral sciences is not always the first in the field of great medical discovery. Though this in part may be true, and ignorance take precedence of science, still if ignorance is to be the mother of discoveries and adornment of our profession, the pandemonium of quackery and ancient superstition will soon revive the slumbering fanaticisms of former years.

The science of medicine, standing as it should, the dearest and most revered, is at the same time the most intricate and complex of all sciences, and demands the greatest attention, and most preparation, as it can truly be said, that it is the minute result of all the other sciences combined.

A reviewer of the profession, as a spectator, stood amazed at the weakness and inefficiency of its representatives when he beheld in it the world-topping pre-eminence of all professions. Repeating the names of the greatest men of which the science can boast, from Æsculapius and Hippocrates, Galen, Aristotle, Herophilus; those of the Alexandrian school down to the learned of to-day, as Drake and Lawson, and hosts of others; "All these," he said, "have had to bow and yield, with their profoundest homage, to the pre-eminence of its grandeur as the sublimest science, and, amidst limitless genius, kneel under the beaming canopy of immortal life."

HYDATID RANULA.

By DR. MAURICE LANGIER. Translated from the "Archives Generales" of August, 1871. BY THOMAS C. MINOR, M. D.

Hydatids have been observed in the majority of organs and regions of the body, but they are far from being found everywhere with the same frequency. While the parenchymatous organs, the liver in particular, contain more than all the other parts of the body combined, there are other regions where they are only exceptionally noticed, or have not been described. The floor of the mouth may be classed among the latter number. It is this fact which induces me to publish a very remarkable case of hydatid tumor of the floor of the mouth that I had occasion to study while at the surgical clinic of *la Charité*. The following is the observation as I noted it down while in the service of Prof. Gasselin.

OBSERVATION.—P. J.—, aged 61 years, employed from the 15th of April, 1869, at the chapel of the Holy Virgin. He is a thin man and has been very feeble for some time past. His health anterior to the time he appeared has been very good; no antecedents which merit notice.

It is six months since (in October, 1868,) that he commenced to feel, with his tongue, a small protuberance in the left half of the buccal floor, an inconvenient protuberance, but not at all painful. The tumor was not long in increasing in size, and with it the inconvenience, which became more and more considerable.

A physician consulted, two months after the *début*, made a puncture which caused the escape of a very clear liquid, and, the next day, passed in a filiform seton. The seton remained four days in its place; an acute inflammation was developed almost immediately, and the patient was forced to keep his bed for the space of eight days.

When the inflammation had disappeared, it was evident that the tumor had sensibly diminished in volume, but it was not long before it increased in size anew, resuming its primitive dimensions. The patient then decided to enter *la Charité*, four months after the puncture.

At the time of his *entrée* (April, 1869,) was found a tumor the size of a large nut, occupying the left half of the floor of the

mouth, and extending over the median line. It strongly compressed the tongue above and backwards. At this time, by making the patient open his mouth, the tongue could only be seen with difficulty; it looked as though it were adherent to the palatine vault.

Mastication was notably restrained and almost impossible; the voice very nasal, and barely intelligible.

On touching the tumor, fluctuation was manifest; but the walls of the sac were thick and hard, and, on the whole, of a consistency quite unusual in a case of ranula; let us add that the presence of some sub-maxillary ganglions of the left side (side of the tumor), hard and insensible, and rolling under the finger, made us fear a complication, upon the nature of which it was a difficult to decide. We could nowhere find any local symptom of inflammation, no heat, nor clamminess of the region, neither any spontaneous or provoked pain. The patient only complained of the inconvenience occasioned by the tumor.

The operation for ranula was decided upon, to take place the 30th of April. It was to consist of two things: the incision of the sac, excision of its walls. The incision caused the escape of a very considerable quantity of pus, and there was, at the same time, expelled a whitish membrane, which I shall reconsider. After the excision of the superior walls of the sac, the finger could penetrate deeply into the cyst and reach the base of the tongue.

Microscopical examination demonstrated the fact that this whitish membrane, expelled with the pus, was nothing else than a hydatid. We found it to be formed of an amorphous tissue transparent, but very regularly stratified. This hydatid formed a sac the size of a nut, had quivering walls, resembling, following the only known comparison, coagulated albumen. The liquid was likewise examined: it had the appearance of fatty and whitish pus. By the microscope, we found in large quantities fatty granulations, crystals of haematine and steric acid, and finally of crochets of echinococci, and of entire echinococci.

The rest of the operation was very simple: the interior of the cavity was cauterized at different times with the crayon of nitrate of silver, and the patient left the hospital completely cured. Since his departure, he has returned to show himself at the service, and the recovery has been perfect (20th of July, 1869).

As I said at the commencement, the point contained in this observation has not yet been described. The work so complete of M. Dayaine contains only two cases of hydatid cyst of the buccal cavity, the one, of Lefoulon, having its seat in the gum; the other of Robert, situated in the tonsil, and similar to that we find in the *Clinique Chirurgicale* of Dupuytren.

M. Nelaton, in his *Pathologie Externe*, the authors of the *Compendium*, M. Landeta, in his excellent thesis upon *Tumeurs sublinguales*, make no mention of hydatids of the floor of the mouth. I do not think I could do better, in order to study in a methodical and profitable manner, this curious point in the history of hydatids, than to compare that which we may call already the hydatid ranula, to a disease somewhat similar, otherwise identical, from a symptomatic point of view, that is to say the ordinary sublingual ranula.

ETIOLOGY.—I know that the opinion generally admitted at the present time is, that hydatids owe their origin to a transformation or to the development of an embryonic tænia. "This embryo, says Davaine, introduced into the digestive tube with foods or drinks, cannot live or develop itself in the intestine before having submitted to certain transformations, leaving this organ by perforating it, and reaching the neighboring parts, either directly, or by means of the bloodvessels which go to the liver or lungs."

In the special case which occupies our attention, basing ourselves on the fact that the seat of the parasitic tumor formed the inferior wall of the buccal cavity, the entrance of the digestive passage, it seems to us, that the particular foods, liquid or solid, containing the embryo of a tænia, must have remained for a certain length of time, in the inferior cul-de-sac of the buccal mucous membrane, below the tongue and back of the inferior maxillary, and that this embryo had reached its place directly by perforating through the thickness of the buccal mucous membrane, and afterwards developing itself there. I must say that this hypothesis appears to me at least as admissible as that which maintains that the embryo leaves the intestine, and makes its way nearer and nearer towards the tissues, until it reaches the interior of the mucous membrane forming the floor of the mouth.

SYMPTOMS AND PROGRESS.—The outset of the disease has been

altogether that of ranula; the symptoms have been slow and obscure, and it is only by chance that the patient has noticed the presence of a small abnormal protuberance.

In both cases, the same inconvenience in deglutition, in phonation, and the same insensibility at the beginning. Later, because of increase of the tumor, the similarity continues. The cyst in the patient at *la Charité* presented, at the end of six months, a very notable development, and, like the large sized ranula, raised the tongue up, compressing it backwards and upwards. Finally, in both cases the fluctuation was more manifest, and the increase in volume of the cyst was not attended by pain.

So, up to the present time, the outset, the progress and the symptoms of hydatids of the buccal floor are those of ranula. Shall we say in the meanwhile that there might have been a complete and absolute analogy between these two species of cysts? I think not, and we shall treat of the differential characters which would, following the occasion, lead us to a diagnosis.

DIFFERENT DIAGNOSIS.—In ordinary sublingual ranula, the wall of the cyst is slight, roseate gray, and, at certain points, almost transparent. Fluctuation is superficial: we feel (when the exploring fingers are separated) the liquid through a very thin membrane.

In the hydatid cyst, on the contrary, the enveloping pouch was hard, resisting and thick, from the point where the teeth of the left half of the inferior maxillary pressed themselves deeply upon the tumor, producing depressions which, at the first sight, resembled true ulcerations.

Fluctuation was evident, but it was in some way deep seated, owing to the thickness of the walls interposed between the fingers and the inclosed liquid. Is it not allowable to conclude after this that in unusual cases, where the membranes of a cyst in the floor of mouth present a great thickness, the single fact that the walls are abnormally consistent must awaken attention, and make us admit the possibility of an hydatid?

I shall say a few words in regard to a point upon which we are unfortunately reduced to a hypothesis; I wish to speak of *vibration*. It is impossible for me to say whether it exists or not, when the subject has not been investigated, and that, because all the symptoms observed have led us to diagnose a ranula of abnormal aspect, it is true, but by no means an hydatid tumor:

the only theory which can be advanced, is that we cannot see any reason that opposes itself to the fact, that it can be produced in the region which occupies attention. It may then be the following the occasion, an important element in diagnosis; it is at the same time the only sign, the exploring puncture well understood excepted, which would permit us to tell the difference between an hydatid ranula and a variety of congenital sublingual cysts, filled with caseous matter, that the authors of the *Compendium* described, and of which an example has been observed in the *Hospital Saint Louis*, by Mr. Denonvilliers. The following description has been given in the *Compendium* by this able surgeon: "When the patient opens his mouth, we see that all the cavity is occupied by the tumor; the tongue is strongly compressed backwards, and we cannot perceive it, but with the finger we can feel the point at the level of the velum of the palate. The exterior is not transparent, as in ordinary ranula; it is opaque, and seems to have a considerable thickness; the sub-hyoidian region is strongly prominent."

It is impossible for one reporting the observation of *la Charite*, not to be struck with the very great analogy that it presents to the description of M. Denonvilliers. Do we need to add, if the diagnosis presents too many difficulties, the exploring puncture is, in the case we speak of, as in all difficult cases, the last resource of the surgeon?

PROGNOSIS.—The prognosis of hydatid cysts of the buccal floor is the same as that of ranula; one will remember that the patient of *la Charite* was reduced to a state of leanness and very serious weakness, he could hardly eat, by reason of the great inconvenience he experienced in deglutition. It is important, then, to intervene and get rid of the disease as soon as possible.

TREATMENT.—The surgical therapeutics of hydatid cysts, in general, may be resumed in the three following procedures: 1st, evacuate the contents of the tumor; 2ndly, to modify or reabsorb the matters contained in the tumor; 3rdly, to extirpate the cyst.

It was the first procedure that we had recourse to in the case we speak of, that is to say, the evacuation of the contents of the tumor.

The incision made and followed by the excision of a portion of the walls, if one has reason to fear that the opening will not

re-close itself, and the liquid completely evacuated, the treatment, consequently, must consist in frequent washings and in the repeated use either of injections of tincture of iodine or the pencil of nitrate of silver, to the end of modifying the internal surface of the cyst, and by that means obliterating the cavity.

Incision followed by excision and repeated cauterizations with nitrate of silver, brought about excellent results in the case of the patient of *la Charité*, in the hands of M. Gosselin. We know that this is the treatment employed by that able surgeon in the case of ordinary ranula.

TINCTURE OF IODINE IN THE TREATMENT OF GONORRHEA.

By E. L. DUNCAN, M. D.

During the late U. S. war I was prompted to try other treatment in gonorrhea and gleet than that recommended in some of our regular works. First, from an entire deficiency, at times, in the medical supply; and also from the continued obstinacy of many cases. And since the war I have used the tincture of iodine in the treatment of gonorrhea and gleet with the same satisfactory result.

MODE OF APPLICATION.—With any convenient fixture apply the tr. iodine, externally, along the entire course of the urethra two or three times daily. Thorough cleanliness of the entire person should be enjoined.

Saline cathartics should be used to keep the bowels in a soluble condition. The following I regard as a valuable adjunct:

R Spir. Aeth. Nit. 3℥.

Tr. opii. 3v.

Dose.—3℥. three times daily. M.

The night erections and chordee may be much alleviated by the use of pulv. opii. and pulv. compt. H. S. S.

A CASE.—Mr. A. L. M——, called at my office, June 21, 1871. He had contracted gonorrhea some eighth weeks prior, and had been under treatment, with no abatement of the disease. (*Irritating injections had been used.*) The treatment was adopted as above described.

July 1. Patient much better, the discharge assuming a gleet character.

July 8. Free from discharge, but too frequent desire to micturate. The camphor and opium continued H. S. S. The iodine discontinued.

July 22. A slight gleety discharge, otherwise, patient doing quite well. The application of the iodine resumed, p. r. n.

Aug. 20. Patient free from any discharge or chordee. Case discharged.

(From the Journal of the Gynecological Society of Boston, July, 1870.)

INTRODUCTION OF A HORSE-SHOE PESSARY (Hodges Open Lever) INTO THE CAVITY OF THE BLADDER AND ITS REMOVAL BY FORCE.

By TOM O. EDWARDS, M. D., of Lancaster, O.

In September, 1868, Miss A——, aged twenty, called upon one of our physicians in extensive practice,* complaining of uterine pain with bearing down, and requested his aid. He designing to introduce an open-lever pessary into the vagina, *put it into the bladder*, and she left for home. Four days thereafter, he took with him his partner as an assistant, and endeavored to remove the pessary by an incision into the urethra one inch from the meatus. Through this incision he brought one limb of the pessary, and tore the other limb through the upper part of the neck, leaving two perforations.

Miss. S—— was betrothed. The day of marriage was fixed for the following month, and was consummated without objection from her surgeon. At the time of the removal of the pessary an enormous calculus (pebble) was exhibited to the patient and friends, *and they were told it had been extracted from her bladder*. A fee of one hundred dollars was charged and paid.

The husband and patient called upon the surgeon some months after, complaining that "something was wrong," alleging that the urine was almost constantly dropping and producing irritation and uncleanness, and were told by that surgeon that "all was right; that had he prayed God to have healed the orifice through which he had extracted the stone, he could not have more completely healed it than it was healed."

I had operated upon an elder sister of the patient four years before successfully, for rectal fistula, and, as some of the symptoms were similar to hers, I was called upon; and, on exploring the bladder, I found a large urethral fistula one inch above the meatus, and about two inches beyond that a puckering cicatrix, at or near the junction of the neck with the bladder.

* Quite recently a candidate for the chair of Urinary Diseases in A CINCINNATI MEDICAL COLLEGE.

This cicatrix had formed a stricture, and I could not pass either a sound or a catheter into the bladder without more force than I thought would be prudent; yet I could empty the bladder by catheter. I recommended an operation, and sent the patient to her father's, prepared her, and in a few days after, in the presence of Drs. Wagenhals, and Boerstler, jr., I performed the operation. After carefully and thoroughly dissecting away the sides of the fistula I inserted three Carlsbad pins, closing the orifice with silver wire by the "twister," introduced a catheter to the stricture, confining it securely, and placed a sponge in the vagina as a support to the pins, leaving my patient comfortable, except from the effects of the letheon. The bowels were restrained by opium suppositories. I removed the sponge daily, and injected into the vagina and over the wound tepid water, affording great comfort. The fourth day, I found on the lower external part of the catheter pure pus. On the next day I was told by the mother that the urine was very bloody, and that she was compelled to remove clots of blood from the catheter in order to relieve the bladder. I removed and cleaned the catheter, found the sponge stained, and some clots in the vagina, but the urine clear. The next morning I was called from home, and did not return until the following day. I then found an importunate message, stating that hemorrhage had come on in the night, and that my patient was considered as lost; and with this the following letter from Dr. Wagenhals, who had been called in during my absence:—

"I was summoned at 2 A. M. to see your patient. Found her in a collapse from hemorrhage from vagina. I removed the clotted blood and used tampon saturated with acetat. plumb. sol., which had the desired effect. Not having a Sims' speculum, I was compelled to introduce the tampon without any other guide than the finger. In relation to the recently closed fistula, I was strongly tempted to use a solution of persulphate of iron, but was fearful of its effects upon the recent wound. No blood escaped through the catheter. The hemorrhage, in my opinion, was uterine. I am led to this opinion on account of the large amount of blood lost, and because there was none escaping from the bladder. The family were greatly alarmed, and I fear, if another hemorrhage should occur, your patient would succumb."

On my way out I met the doctor, who had been summoned a second time on account of the hemorrhage. This was a mistake, as I not only learned from him, but found on arrival. The patient was blanched, for she had lost ten or twelve pounds of blood. Her extremities were raised and head lowered. The catheter was in position. Stimulants and beef tea were freely given, and suppositories in the rectum quieted bearing down efforts to expel the tampon and the catheter. The next day the tampon was removed, and, to my regret, my pins were found to have

been "carried away" in the fight for life. All that now remained to do was to repair damages, and begin anew. This was done by nutrients. Bark and iron, etc., were given, and in six weeks the patient came to my boarding-house, and the then greatly diminished aperture was closed by two pins, as before, without anæsthetic agents. These healed the remainder, except a small aperture on the right side, which the daily application of caustic will remove, or, if it fail one pin will suffice. From the past experience, I did not leave the catheter in the neck of the bladder, but having her in an adjoining room, I catheterized her from four to ten times daily, for eleven days. My patient becoming nostalgic, I allowed her to return home during the next menstrual flow, having instructed her mother in the use of the caustic (grs. xl. to the ounce), applied by a camels-hair pencil. The first operation was performed on Jan. 12th, seven days after the close of the menses; and from this fact I am compelled to differ from my friend Wagenhals as to the origin of the flow. I trace it to ulceration from the pressure of the catheter over the cicatrix and stricture, opening the artery in the dorsum of the neck of the bladder. As I said, on the fourth day I found pus on the external end of the catheter, the urine bloody, catheter clogged. This occurred eleven days after the menstrual flow, and as the uterus was now closed, hard and impervious, I could not believe that hemorrhage came from it. Believing so, I catheterized, instead of leaving the catheter in the neck, at the second operation, with entire satisfaction. I saw my patient a day or two since; found the fistula closed, except a small aperture, as mentioned before, and believe the caustic will close that, the performance of marital rights to the contrary notwithstanding.

This case is the second of the introduction of a pessary into the bladder, Prof. H. R. Storer's reported case having been the first;* and in correspondence with him he gives me a report of a third.†

In his report to me of the third case, he quaintly remarks, "we shall soon have quite a literature of vesical pessaries." I trust not, for the honor of the profession.

I have heard that it took Dr. Storer four hours and a half to remove the first pessary. In the case by section of the urethra that I now report, the time spent was two hours and a half, by report of the family, "and the doctor was as bloody as a butcher."

How a man can make so egregious and dangerous a mistake is a wonder to me, and I cannot treat these cases with the charity of Prof. Storer. I cannot understand how a pessary can be thus introduced, and the apology offered made this case still more embarrassing to me: "I must have put one leg into the urethra, and as I reached for grease to anoint my fingers the bladder

* New York Medical Record, July 15, 1863.

† Reported at the 26th regular meeting of the Gynecological Society.

must have sucked it in." This adds obscurity, and gives the bladder powers never dreamed of in any philosophy I have ever read or heard of as yet.

NEW GROWTHS.

Abstracts of Mr. Birkett's six lectures at the Royal College of Surgeons have been published. We proceed to epitomize them, in order that our readers may possess his views in the smallest space.

Effusions of fluid in the body are either diffused, percolating through the connective tissue, or circumscribed, constituting a cyst. The membranous sac which encloses the fluid consists essentially of three parts: an external fibrous coat derived from the connective tissue of the part in which it happens to be developed, a tunica propria, and an internal epithelial lining. In all cysts, at some period or other, these parts may be traced.

There are five methods in which cysts are developed (1.) by irritative action, as in blister, which contains all the elements of a cystic growth. The cyst which becomes formed around a foreign body, as a bullet, or an effusion of blood, especially upon the scalp, is developed in the same way. Simple pressure may thus produce a cyst, as in the case of the small bursa which is sometimes met with beneath a corn. (2.) Cysts are formed out of pre-existing structures, such as sacculi and canals of various kinds, as in the cyst sometimes formed from the bursa in front of the patella, ranula, and the cystic growths which occur in the labia majora, formed for the dilatation of the duct of the secreting gland by obliteration of its aperture. (3.) Cysts are sometimes suddenly developed in a hard tumor by a process of softening down. We are surprised to find a tumor which was once firm, solid, and resistant to the touch, now consists of little else than a small growth and a large collection of fluid. In carcinomatous growths this sometimes occurs by a mechanical process. A sort of ulceration may go on within the fibrous capsule on the side of the tumor farthest from the skin; the escape of the resulting secretion is prevented, and the distension of the fibrous envelope results in a cyst. The irritation of the pent-up fluid still further augments the process. The occurrence of this change may render the diagnosis of the nature of such a growth very difficult. (4.) Rokitanaky and Hodgkin thought the development of a cyst by the enormous enlargement of a single nucleated cell might occur, but Mr. Birkett has never been able to trace any process of this character. (5.) Cysts may arise from the acini of gland-tissue. This follicular development is well known in the ovary and in the thyroid gland. The change in

the follicles might arise from effusion of fluid either into the caecal termination of the acinus, or into the developing nuclear tissue which surrounds it.

The contents of cyst are (1.) blood, (2.) serum, (3.) various contents which depend on the organ or structure in which the cyst is developed. Two kinds of serum are met with; one coagulable, like the ordinary fluid of a hydrocele, and another which will not coagulate by any means which will coagulate the ordinary form. This occurs occasionally in cysts in the mammary gland. The wall of such a cyst, which is lined by epithelium, is so delicate that after the sac is emptied scarcely any trace of it can be found. The triple division of cysts, according to their contents, which was proposed by Mr. Simon, and has been adopted by Virchow, answers very well for practical purposes; it is into extravasation cysts, exudation cysts, and retention cysts. A fourth class might be formed of those in which the serum will not coagulate—transudation cysts. The delicate wall may act as a sort of filter, and keep back the albumen. A class of cysts which, however, it is not easy to arrange in any one of these divisions consists of those which arise from an increase of volume of the spaces of the alveolar and connective tissue. The surrounding tissue is sometimes converted into a very firm envelope.

The chief changes which may take place in the walls of cysts are thickening by new growth (often seen in bursæ); inflammation, sometimes leading to adhesions which render very difficult any subsequent attempt at excision; new growth around a cyst, as in a remarkable case in which schirrus became developed about a mammary cyst, which at first was quite simple; growths from the interior; and, lastly calcification and ossification. Familiar examples of extravasation cysts are those which result from effusions of blood, either into pre-existing spaces, as the tunica vaginalis, or into tissues, as the brain or connective tissue. A more interesting class consists of milk cysts, arising in the breast during the period of lactation in consequence of the rupture of a milk duct. They usually arise suddenly, and may persist for a considerable time, sometimes ultimately presenting much difficulty in diagnosis. The relation of a new growth in the mammary gland to its active or inactive condition is a point of great importance for consideration in determining its nature.

Retention cysts are those in which the duct of a gland has become occluded, and its walls stretched over the retained secretion, as in sebaceous or atheromatous cysts, associated with hair-follicles. Of these there are three kinds: one filled with epithelial scales, another containing sebaceous and greasy matter, and others hard and fibrous, with very little cyst wall. The first is probably due to obstruction at the neck of the hair-follicle, the second to obstruction in the follicle near the opening of the se-

baceous gland, and the third to an obstruction lower down in the hair-sac, so that the cells which should constitute the hard fibrous part of the hair become transformed into a dense laminated mass.

Obstructions at the orifice of the racemose muciparous glands may cause the dilatation of the secreting part into one single sacculus. Such cysts are especially common in connexion with the labial glands, also on the inside of the nose, the epiglottis, and the pharynx. They contain a very tenacious fluid. Sublingual cysts constitute an important class. Many of them are doubtless mucous cysts; but there are several ducts in this situation, and it is generally supposed that these cysts are connected with them. This is not always so. What is commonly called ranula is, in most cases, only a mucous cyst. The submaxillary duct may become obstructed, but it is usually in consequence of a concretion there, and in circumstances quite different from those in which sublingual cysts are ordinarily developed. In one case of obstruction from concretion there was no swelling in the mouth. Sudden obstruction is attended with great pain. Ranula is usually painless. They contain simple mucous, not saliva. The word ranula, originally introduced from some supposed resemblance to the neck of a frog, had better be given up.

Another interesting class of mucous cysts are those which develop between the alveolar process of the superior maxillary bone and lip. They are readily distinguished, and present a peculiar sensation under the finger, like parchment crackling, due to the thinning of the wall of the antrum. Muciparous cysts also sometimes form within the antrum, and these may produce by pressure so much absorption as to show themselves along the edge of the alveolar process, where it is not uncommon to find these swellings. It is probable that some forms of nasal polypus are of a cystic character.

In the neighborhood of the vagina cysts are very common. They are developed both from the glands of Cowper and from the mucous glands which extend up to the uterus. The labium is a frequent seat, and may be enormously distended by one of the formations.

Obstruction of the excretory ducts of the breast near the nipple often produces cysts at that part. The contents may often be squeezed out through the duct. Sometimes an elongated distension of a duct is convoluted, and presents on section an appearance as if it consisted of many cysts. They are often accompanied by a new intracystic glandular growth.

The treatment of cysts of this class is tolerably simple. Where practicable, excision should be practised. In the floor of the mouth they often recur again and again, and give rise to much trouble. A plan which has of late been adopted with success consists in dividing the mucous membrane of the mouth, making

a hole in the sac, and stitching that to the submucous tissue, so as to form a permanent fistulous opening, and not any longer to allow the cyst to enclose the liquid secreted.

Symple cysts in the breast, away from the nipple, are of rare occurrence. They present the remarkable character that the fluid they contain never coagulates by any means we can adopt. It is encircled by a delicate fibrous membrane. Such small cysts are sometimes met with scattered over the posterior surface of an atrophic organ. The fluid in them is of a peculiar light-brown opalescent tint, and always very alkaline. When excessively alkaline the fluid sometimes becomes clouded by heat, but becomes clear again on the addition of a little acid. It never becomes turbid with acid only. These cysts occur usually about the middle period of life in all grades of society, in the robust and healthy, but almost invariably in association with some ovarian or uterine disturbance. When these cysts are very tense from fluid, and surrounded by gland-tissue, their diagnosis sometimes presents much difficulty. Fluctuation may be quite imperceptible, but there is always a marked elasticity about them, and not that dead hardness which a solid growth presents. The markedly globular form, and the presence of a distinct line of circumvallation around the cyst, are also distinctive characters.

Another class of retention cysts are those connected with the epididymis. The fluid in most cases contains spermatozoa. Most are doubtless formed from the tubes themselves by a local distension, but some have been thought to be due to the formation of a cyst in the connective tissue underneath the tunica vaginalis, in consequence of the rupture of one of the delicate tubules. Thus, instead of a retention cyst, we should have an extravasation cyst. Mr. Curling has shown that in some of these cases, by passing mercury along the vas deferens and injecting the tubules of the epididymis a certain quantity of mercury gets into the sac, there is reason to think apart from injury. Mr. Paget has suggested that the presence of spermatozoa may be accounted for by the fact of the same vessels traversing the sac which supply the epididymis. At the bedside these cysts are often thought to be ordinary cases of hydrocele. But the outline of the tumour, when of moderate size, is exceedingly characteristic. The distinction between the cystiform development and the testicle shows that the two are not in the same sac, and the axis of the swelling in many cases is not from above downwards, but transverse.

Cysts of the spermatic cord sometimes pass back through the external abdominal ring into the inguinal canal. They occur at a much earlier age than those of the epididymis, and are due to the canal of the tunica vaginalis being obliterated only in part. When they commence later in life they are probably due to local irritation, as from wearing a truss.

If a bursa be exposed to frequent pressure, inflammation is set up in it, and its wall undergoes great thickening from the development of connective tissue. Trabecular bands are sometimes formed across its interior. Such cysts occasionally occur in positions where bursæ are not known to exist, but probably their origin is similar.

The "dermoid" or "proliferous" cysts sometimes met with beneath the integuments and in the ovary constitute another interesting class. They are perfect in formation, consisting of the tissue of the dermis, with a cuticular lining, and on them hairs and true sebaceous follicles are developed. All are congenital, and there is little doubt that they owe their origin to some malposition of some of the minute elements from which the hair-follicles, sebaceous glands, etc., are developed.

A remarkable group of cysts are those sometimes called "serous" cysts, or "fibro-cystic tumours," developed in immediate relation to the connective tissue of the body, and which seem to be associated with some vascular growths. They are most common in the neck and in the axilla, and in those loose parts where the connective tissue is in most abundance. In another remarkable class of cases, the cyst is first noticed soon after birth.

Some cysts associated with intra-cystic growths are glandular in character. The cyst in these cases may or may not communicate with the nipple. When it does, there is a constant escape of serous fluid. When the cyst is closed, its contents are usually tenacious and glairy, and always coagulate with heat or acids. German pathologists regard it as due to a peculiar "mucous," change occurring in the rapidly formed connective tissue, and not as a formative fluid, according to the older English view.

Other cysts contain growths composed not of glandular tissue but of elementary cells, epithelial-like structures somewhat resembling those met with in carcinomatous growths, but arranged differently. Some of these cysts are connected with ducts, opening on the nipple, others are not. The innocent character of most cystic tumors of the breast is seen in the comparative longevity of many suffering from them, and the absence, in most cases, of any traceable connection between the tumour and the actual cause of death. Spontaneous cure by sloughing of a cyst in the breast may occur, and they do not return after excision.

Cysts may occur, though rarely, in connection with fibroplastic tumours of the breast, tumours composed chiefly of those elongated fusiform cells which are associated with the development of connective tissue. Such tumours in the breast are not unfrequently mixed, sometimes with innocent growths of gland-tissue, occasionally with neighbouring nodules of genuine cancer.

In their recurrence also, they have a remarkable tendency to become cancerous.

Colloid tumours of the breast, in Mr. Birkett's experience, have been innocent in character. Cysts associated with carcinoma are not common, although about the middle of the last century the occurrence of bloody cysts in cancerous breasts attracted considerable attention. They are formed by the degeneration of the tissue of which the cancer growth is formed; during the softening a little blood or serum is easily poured out, and, collecting at various points behind or in front of the breast, it forms cysts. A cancerous growth in such a cyst is never pedunculated, like the innocent granulation growths already described; it is attached by a broad base, and seems to grow through the cyst-wall, or rather it grows from the tissue of the mammary gland, and then forms the cyst upon itself.

TREATMENT OF INFLAMMATION OF LIMBS BY CUTTING OFF THEIR MAIN ARTERIAL SUPPLIES.

By DR. S. W. GROSS.

In this paper Dr. Gross first details a case of intense sub-aponeurotic inflammation of the hand, in which he was forced to take up the brachial artery for bleeding from incisions made by the surgeon.

Up to this time (he says) there had not been any considerable diminution in the severity of the local symptoms, and the gangrene now involved the third and second phalanges of the ring-finger. On the following morning I found that the swelling had declined, and that the pain, heat, and purulent discharge had also diminished. In the course of a week the hand had regained almost its natural size, and a distinct line of demarcation had formed on the proximal side of the first phalangeal articulation. Ten days later I removed the offending finger at its metacarpal junction, and in a few days more the cure was perfect.

After giving a history of the subject, he recommends manual compression of the artery as a safer, less serious, and equally effectual method as the ligature. In 1867 Professor Vanzetti, of the University of Padua, proposed digital compression of the main artery for the cure of phlegmonous or articular inflammation of the extremities, and detailed two cases as illustrations of the efficacy of this treatment; one being an instance of bad phlegmonous erysipelas of the arm, cured by compression of the subclavian artery, and the other a case of acute arthritis of the wrist, successfully managed by compression of the brachial artery. So manifest have been the advantages derived from manual compression, that it now forms the ordinary means of treat-

ing such cases at the Padua clinic. It need not be continuous, and the patient may be taught to exert it himself. In general it need only be maintained for eight or ten minutes, and after resting, again resumed. Professor Nelaton, in a case of inflammation of the hand, after a lacerated wound, necessitating amputation of the finger, obtained good results from the compression of the brachial artery.

The same principle of practice has been carried out in other ways. Thus Mr. Jackson, of the Sheffield Hospital, subdued an inflammation of the knee-joint, consequent upon a punctured wound, by compression of the femoral artery with a tourniquet for forty-eight hours; but the disadvantage of the use of an instrument is obstruction to the venous return. The *Lancet*, December 7, 1867, has briefly noticed a case of severe traumatic inflammation of the hand, under the care of Mr. Moore, at the Middlesex Hospital, in which the compression of the artery was procured by acupressure. The treatment here was quite successful.

Upon the whole, manual compression is to be preferred to other measures which have for their object the arrest of the circulation in badly-inflamed parts.—*Medical Times*.

TRANSPLANTATION OF SKIN.

BY PROFESSOR G. H. B. MACLEOD, University of Glasgow.

In the *British Medical Journal* for April 1st, I have entered pretty fully into an account of the results obtained in my wards from this most interesting proceeding. I shall very shortly recapitulate the practical teaching of the observations made. The object, of course, held in view is to multiply the centres of cicatrization over a large, open granulating surface, so as to hasten closure, diminish contraction and deformity, and provide a stronger and more elastic covering for the part. To accomplish skin grafting we must attend to the following points:—

1st. The surface on which the grafts are to be placed must all present the characters of a "healing sore." The granulations must be sound and viable.

2nd. The graft does best when it is about half the size of a threepenny-piece. It should be composed of pliant, sound skin. Scrapings of epidermis have not succeeded with me, though their presence on the sore has sometimes seemed in a curious manner to augment the cicatrizing activity of the edges. A thickness of tissue does best, which, while it includes the "stratum malpighii," and as much of the corium as serves to give it consistence, is yet pliable and thin.

3rd. The graft is neatly spread out on the *undisturbed gran*

ulations by means of two needles, and fixed by a strip of adhesive plaster, so cut, that while the ends are broad, to get a good hold, a narrow portion only partially covers the graft, and so we are enabled to watch it.

4th. No dressings are used, as all contact is carefully avoided for fear of displacing the graft. No application was made to the sores, nor alteration made in the patient's diet, etc.

5th. For some days (4 to 23) no change occurs, and then the transplanted portion begins to grow; or, what is very common, the graft desquamates, and we suppose the experiment has failed, when lo! from the place of its insertion, a little island of epidermis appears and spreads around. Non irritating dressings may then be applied safely to the surface.

6th. The general health of the patient closely affects the progress and growth of the grafts, and so will demand supervision. If any derangement of the system occurs the growth of the graft may be arrested for weeks.

7th. Grafts from one person succeed perfectly on another. Mr. Lee, one of my dressers, supplied several, which grew well on a patient operated upon.

8th. I tried in two cases, and in one succeeded in a very remarkable manner in healing granulating ulcers, by covering them thickly over with the serum from a blister raised by cantharides. In the successful case, a sore which had for months resisted every kind of treatment (being a "menstrual" ulcer), was closed to a point by this plan in three days. Further experiments will be made in this direction.

As a good example of what can be accomplished by transplantation, I will, in conclusion, relate one case. A laborer of 32 years of age had his foot crushed between two iron rollers, all the metatarsal bones being broken across, and the intergument entirely peeled off the whole anterior surface of the foot, while the sole was so separated from the underlying parts that the hand could be passed under it. The foot was so cold and discolored that I scarcely doubted but that gangrene would set in, and the question of primary amputation was for a time entertained. In a day or two things began to improve under carbolic oil dressing, and a good position. The whole that remained of the coverings of the dorsum of the foot with the toes eventually came away, and a large hard surface, in which the tendons lay exposed, remained. The sloughs were carefully and gently removed as they became loose, and the patient's general health was well taken care of. Feeling convinced that the utility of the foot would be all but destroyed if the wound was allowed to cicatrize in the ordinary way, and that at least it would be a very long time before the wound could close, I ingrafted six pieces of skin with the happiest effect, as from each an islet of epithelium extended, which, in eight weeks from his ad-

mission, entirely covered the denuded surface with a distensible, pliant, and firm skin, which occasioned no abnormal contraction, nor any deformity, and thus the part was restored to its pristine condition—a result which was quite unattainable, so far as my experience goes, without such aid as was got from the iografting. I may add that, independent of its practical value, skin transplantation suggests many most interesting questions for the contemplation of hospital surgeons.

THE FUNGOID THEORY OF CHOLERA.

Mr. T. R. Lewis, M. B., who was specially appointed, says the "Medical Gazette," to investigate the theories of Hallier and Petenkofer with regard to cholera, announces, after a long and careful examination, that:

1. No "cysts" exist in choleraic discharges which are not found under other conditions.

2. Cysts or "sporangia" of fungi are but very rarely found under any circumstances in alvine discharges.

3. No special fungus has been developed in cholera stools, the fungus described by Hallier being certainly not confined to such stools.

4. The still and active conditions of the observed animalculæ are not peculiar to this disease, but may be developed in the indigenous material even outside the body.

5. The flakes and corpuscles in rice-water stools do not consist of epithelium, nor of its *debris*; but their formation appears to depend upon the effusion of blood plasma; and the "peculiar bodies" Parkes found therewith correspond very closely in their microscopic and chemical characters, as well as in their manifestations of vitality, to the corpuscles which are known to form in such fluid; these are generally, to a greater or less degree, associated with blood-cells, even when the presence of such is not suspected, especially as the disease tends toward a fatal termination, when the latter have frequently been seen to replace the former altogether.

6. No sufficient evidence exists for considering that vibriones and such-like organisms prevail to a greater extent in the discharges from persons affected with cholera, than in the discharges of other persons, diseased or healthy; but that the vibriones, bacteria, and monads (*micrococcus*) may not be *peculiar in their nature*, for these *do* vary, and may not be the product of a peculiar combination of circumstances and able to give origin to peculiar phenomena in a predisposed person, is "not proven."

TREATMENT OF POISONING BY CARBOLIC ACID.

Mr. Charles Roberts remarks that the indications for treatment are to remove the poison from the stomach as speedily as possible, to neutralize its action, and to treat the general symptoms of collapse in the ordinary way. A mixture of olive oil and castor oil has been recommended, and employed in some cases, with the object of diluting and carrying off the poison by the bowels, on the theory that it acts only as a corrosive, and is not absorbed. As we know that it is absorbed, it would be doubtful practice to continue this treatment, and to make the acid run the gauntlet of the fat absorbing surfaces of the small intestines. As carbolic acid is very slightly soluble in water, probably the speediest and most effectual way of removing it mechanically from the stomach would be to administer large quantities of warm water, or of mustard and water. As it is very soluble in glycerine, that substance with water and sulphate of zinc might be employed after the bulk of the poison had been removed by the former plan. From the serious action of the acid on the mucous membrane, the stomach-pump should be employed with great care, and probably would often be inadmissible. Mr. Roberts states that he knows of no substance capable of neutralizing the acid chemically, but its well-known affinity for albuminous compounds would point to eggs and finely mixed or powdered *raw* meat as likely to prove of service. If eggs were used, it would be necessary, for obvious reasons, that they should be very much diluted by being whipped up with milk or cold water. Milk is not coagulated by carbolic acid, and therefore would not act as a neutralizer, but it would be a more suitable application than oil to the injured mucous membrane, and less likely to produce further discomfort to the patient. The general symptoms of collapse must be treated in the usual manner by internal stimulants, and friction and warmth to the skin. The rectum would be the most suitable part to which stimulants should be applied. If raw meat were given, it might be well seasoned. As brandy dissolves carbolic acid, and is itself speedily absorbed, its administration by the stomach would be contra-indicated.—*British Medical Journal*.

MEDICAL GLEANINGS.

A NEW METHOD OF DISINFECTION.—Edward H. Hoskin, M. D., of Boston, Mass. (*Boston Medical and Surgical Journal*), has designed a new and simple apparatus, which he calls an "Eudipile," the object of which is to vaporize certain chemical substances, and thus thoroughly to disinfect the air, walls, ceiling, and the

entire contents of any apartment. It consists of a bottle, wick, and—attached to the free end of the wick—a bulb of spongy platinum. Into the bottle should be poured an alcoholic solution of the substance which it is desired to vaporize; the wick is then to be lighted, and the flame extinguished as soon as the ball becomes red hot, which requires but two or three minutes. The ball is now fed continuously by the wick, and will continue red hot as long as any fluid remains in the bottle, and, in this condition, it will readily vaporize the substance in solution, minute particles of which are thus scattered throughout the atmosphere. A bottle holding two ounces will throw out a constant steam of vapor for about 16 hours, at an expense not exceeding twenty cents.

ENCYSTED HYDROCELE.—Dr. Guersant (*Medical News and Library*) observes that this form of infantile hydrocele consists in a small tumor, of greater or less size, developed in the course of the cord. It does not produce any change of color of the skin, is fluctuating and transparent, more or less resisting, slipping readily between the fingers as they grasp it, descending when we endeavor to bring down the testicle, and again mounting upward towards the ring when we relinquish our hold. This is a proof of its undoubted connection with the cord of the testicle. This tumor is developed without appreciable cause, does not produce pain, remains a long time stationary, and sometimes increases in volume. It never terminates in any alarming manner. It should not be confounded in children with varicocele, for he has never observed these venous dilatations in the youngest children, and he makes the same remark in regard to hæmorrhoids; neither should it be confounded with a hernia, for it does not pass back into the abdomen. The surgeon should be aware, however, that false encysted germs, very rare tumors having special characters—non-transparency, for example,—are met with in this region. In encysted hydrocele, the simple injection of alcohol has generally been sufficient to produce a cure. A small seton, introduced in the same way as in an abscess, has also given good results, without very intense inflammation and without any recurrence.

TREATMENT OF ALBUMINOID DISEASE OF THE KIDNEY.—Dr. Jas. H. Hutchinson, Physician to the Pennsylvania Hospital (*Medical Times*), says that the treatment of these diseases differs from that usually employed in other forms of Bright's disease. There is no indication to increase the flow of urine, for it is already sufficiently free, and the dropsy which is present depends simply upon the condition of the coats of the blood-vessels, which allows the ready passage of serum through them. The indication is rather to endeavor to prevent the loss of albumen, and with this view he prescribed to two of his patients ten grains of gallic

acid, four times daily, and for the older one, since he had a syphilitic history, ten grains of iodide of potassium, also three times daily. In the case of a boy, with the troublesome symptom, gastric irritability, he resorted to the use of lime-water and hydrocyanic acid and morphia. In many cases it resists every remedy, and, by the vomiting it induces, undoubtedly hastens the fatal issue, especially when diarrhea exists at the same time—a coincidence which is by no means unfrequent in cases similar to these. These symptoms depend, he says, probably upon the disease of the blood-vessel of the stomach and intestines.

HYDRAMYLE AS AN ANÆSTHETIC.—The *Medical Times and Gazette* says this new anæsthetic "has been again administered during the present week by Dr. Richardson for short operations, and with continued favorable results. The vapor is so rapid in its action, that in a case of the extraction of a molar tooth, by Mr. Peter Matthews, on Monday, the patient was rendered insensible, the operation was performed, and recovery was completed in fifty seconds. For tooth extraction, Dr. Richardson lets the patient inhale for twenty or twenty-five seconds, and then, although there is still consciousness, he withdraws the vapor. After this a deep but brief stage of unconsciousness comes on, during which the operation is carried out. The delay in the production of anæsthesia is due to the insolubility of the hydramyle—that is to say, after the lungs are charged with the vapor, time is required for the blood to take up the narcotic and carry it to the nervous centres. The same phenomena may be observed, in a lesser degree, from bichloride of methylene and from methylic ether. For short operations, such as tooth extraction, the occurrence of deeper insensibility, after the inhalation has been stopped, is an advantage, and the fact that the insensibility intensifies for a short time, as stated, will have to be specially remembered by administrators."—*The Medical Cosmos*.

DIPHTHERIA—Dr. James E. Reeves, Wheeling, W. Va. (*The Medical Times*), states that experience has abundantly satisfied him that the use of strong caustics is not advisable in the treatment of diphtheria—that in numerous instances they aggravate all the symptoms, and thus greatly endanger the patient. The tinctura ferri chloridi may be applied in full strength to the diphtheritic patches and to the surface around their borders, by means of a camel's hair pencil; but even this practice he has generally abandoned during the last five or six years, and now contents himself with gargles or the atomized spray of the chlorine and iron mixture (℞. Potas, chlorat, 3 ij.; acid hydrochloric puri, 3 iss.; aquæ, 3 vij; tinc. ferri chloridi, 3 j. M.) every hour or two when the patient is awake. At the same time this mixture may be internally administered, in the dose of from

twenty drops to a teaspoonful, with or without a little simple syrup, every two or three hours, with the addition, if need be, of sulphate of quinia. Warm atomized inhalations of the chlorine and iron mixture, according to the above formula, promise, he thinks, the greatest hope in cases of diphtheritic croup.

TREATMENT OF GONORRHOEA BY WARM WATER INJECTIONS.—Dr. John O'Reilly (*Am. Practitioner*), in recommending warm water injections in the treatment of gonorrhœa, says that the subjoined conclusions may be drawn from his experience: 1st. That gonorrhœa yields to local treatment, and even water injections. 2nd. That water injections or medicated lotions owe their efficiency to their frequent application. 3d. That the common small syringe should be done away with in treating this disease, and none used but those throwing a continuous stream. 4th. That large injections, by fully distending the mucous membrane of the urethra, insure a speedier cure than those less copious.

LUPUS RETARDED BY THE GALVANO-CAUTERY.—An obstinate and extensive case of lupus of fifteen years standing, involving the right and left alæ nasi, under the observation of Dr. D. W. Cheever, at the Boston City Hospital (*Boston Medical and Surgical Journal*), was relieved by the judicious use of the galvanocautery. When the patient was discharged, the edges of the ulcer presented healthy granulations, no new tubercles or ulcerations having appeared.

FRACTURES OF THE FEMUR AND LOWER EXTREMITY.—Dr. Stromeier (*British Medical Journal*), in his ambulance at Floing, close by Sedan, where a good deal of hard fighting took place, treated then thirty-four fractures of the femur, and in twenty-four there was a prospect of cure: four were doubtful cases, and only six died. His table of results in fractures of the leg is also very satisfactory. Out of thirty-one fractures of tibia and fibula, or both, caused by gun-shot injury, only three died, while the result was doubtful in six instances.

TRACHEOTOMY IN CROUP.—Prof. Steiner, of Prague (*American Journal of Obstetrics*), in a paper on "Tracheotomy in Croup," translated by John C. Jay, Jr., M. D., N. Y., says the wound requires treatment in many cases. When its neighborhood is much infiltrated, and when, in consequence of the subsequent necrosis, more or less loss of tissue obtains, he ordinarily uses a solution of potass-chlorat. ($\frac{1}{2}$ to 1 drachm to 3—4 oz. water) applied by means of little dossils of charpie. The greatest cleanliness is necessary in the removal as soon as possible from the wound any secretion which may have been expelled from the trachea. If the loss of tissue undergoes a gangrenous degeneration, he uses, instead of the chlorate of potassa, chloride of lime combined with the internal administration of a preparation of quinine with acids and wine.

CHLORAL IN SENILE GANGRENE.—Dr. J. C. Butcher, North Lewisburg, Ohio (*Leavenworth Medical Herald*), publishes a case of senile gangrene, in which the administration of chloral had a magical effect in giving rest to the patient. Previously, morphia was given by hypodermic injections, and vomiting followed the next day after its administration. He finds that small doses of chloral produce the same effect as large ones. His formula is as follows:—R. Chloral, 3 i.; simple syrup, 3j. M. Dose, a teaspoonful every hour.

THE CEPHALOTRIBE.—In a recent discussion on the application of the cephalotribe by the members of the Philadelphia Obstetrical Society, Dr. Ellwood Wilson did not credit the statement of those physicians who reported successful deliveries with it in pelves whose conjugate diameter ranged from two to one and a half inches.—*American Journal of Obstetrics*.

LABOR OCCURRING WITH A LARGE OVARIAN CYST.—A case of this character is published by Dr. J. C. Reeve, of Dayton, Ohio (*American Practitioner*). The patient, aged 28 years, with a large ovarian cyst on the right side, was delivered, before the operation of tapping, of a healthy male child weighing seven pounds. About two months and a half after delivery ovariectomy was performed, and the cyst removed. Its weight, including fluids and solids, was 87 pounds. The patient died. Mr. Clay, of Manchester, in reporting a case of the kind, in which he tapped during pregnancy, and in which, ten days after labor, rupture of a large cyst into the bladder occurred, with recovery, says:—"I have diagnosed nearly two thousand cases of ovarian disease, but in the whole of that experience I have only seen two cases of pregnancy co-existent with extensive ovarian disease."

Book Notices.

THE FUNCTIONS AND DISORDERS OF THE REPRODUCTIVE ORGANS IN CHILDHOOD, YOUTH, ADULT AGE, AND ADVANCED LIFE, considered in their Physiological, Social, and Moral Relations. By WILLIAM ACTON, M. R. C. S. Third American, from the Fifth London Edition. Philadelphia: Lindsay & Blakiston. 8vo., pp. 348. 1871.

The author in his preface to the fifth English edition states he has sought to investigate the subjects treated of, in the calm and philosophic spirit in which all scientific inquiries should be approached, and has striven to keep the text free from any sentiment or expression incompatible with the dignity and the high calling of a medical man.

Says the *British and Foreign Medical-Chirurgical Quarterly Review* in speaking of this work: "We think Mr. Acton has done good service to society by grappling manfully with sexual vice, and we trust that others, whose position as men of science and teachers enable them to

speak with authority, will assist in combating and arresting the evils which it entails, and thus enable man to devote more enduring energies and more lofty aims to the advancement of his race, and to the service of his God."

We cordially recommend this work to every practitioner of medicine. There is no physician who is not called upon more or less to give advice in and treat disorders of the reproductive organs, and yet there are probably no class of diseases of which his knowledge frequently is so limited. Certainly there are no ailments of more importance, or that more frequently entail misery on the individual, and why, therefore, they should be so neglected we do not understand. If the derangements of the body generally should be made the subject of our study, *all* should be, whether they have been brought about as the results of ignorance or vice or not. We believe with the London *Lancet* that the only way by which some of the most important functional ailments and aberrant physiological states affecting humanity can be rescued from the grasp of the most disgusting and villainous quackery, and treated with benefit to the patient, is by the scientific and conscientious practitioner *openly* taking them under his own charge.

Mr. Acton in this edition has followed the natural division of the subject, and has considered it under the four main periods of—CHILDHOOD—YOUTH—ADULT AGE, and ADVANCED LIFE. Taking each period separately, he has first discussed the normal *functions* or *conditions* of the reproductive organs incidental to it. Having fully explained these by the help of the most recent physiological investigations, he has examined the *disorders* to which each period is most subject. Scarcely a single ailment to which the generative functions are liable has escaped notice. To each it will be found that he has at least indicated the appropriate treatment.

THE TEETH, AND HOW TO SAVE THEM. By L. P. MEREDITH, M. D., D. S. Philadelphia: J. B. Lippincott & Co. 18mo., pp. 271.

The thanks of the profession, and the public generally, are due to our friend, Dr. Meredith, of this city, for his very valuable little work. As the Doctor states in his preface, it is a matter of wonder that many books of the nature of this have not been written. The teeth certainly are of the highest importance, and their preservation should, therefore, be a subject of the greatest concern, but, unfortunately it seems to attract but little interest. This should not be so, for the general health of the individual depends largely upon the teeth. Without good teeth there cannot be proper mastication of the food, and the result will be dyspepsia with all of its horrors and other numberless ills.

The *thesaurus* of dental knowledge is very large, but is locked up in the tomes of the scientific dentists, and has not been available for general use. Considering this fact, Dr. Meredith has endeavored to bridge over the stream of ignorance that lies between the profession and the masses.

We cordially recommend the work to all. Although prepared more particularly for popular use, physicians will find it of great service to them for it contains a very large amount of information that cannot be found in their text books.

THE DRUGGISTS' GENERAL RECEIPT BOOK: Comprising a copious Veterinary Formulary. By HENRY BEASLEY, Author of the "Book of Prescriptions," etc. Seventh American from the last London Edition. 8vo., pp. 498. Philadelphia: Lindsay & Blakiston. Cincinnati: R. Clarke & Co. 1871.

This will be found a very useful work to physicians, veterinary surgeons, druggists, etc. It contains very complete classified lists of

recipes of medicines for horses, sheep, cattle, and all domestic animals, with directions for the mode of using them. It will be invaluable to those called upon to prepare medicines for the disorders of the lower animals. Besides this, it has numerous recipes in patent and proprietary medicines, druggists' nostrums, etc.; perfumery and cosmetics; beverages, dietetic articles, and condiments; trade chemicals, scientific processes, and an appendix of useful tables.

THE PHYSICIAN'S DOSE AND SYMPTOM BOOK, containing the Doses and uses of all the Principal Articles of the Materia Medica and Official Preparations; also outlines of General Pathology and Therapeutics, etc. etc. By JOSEPH H. WYTHE, A. M., M. D. 10th Edition. 24mo., pp. 277. Philadelphia: Lindsay & Blackiston. Cincinnati: R. Clarke & Co. 1871.

The favor with which this little manual has been received, and the number of copies sold, is proof of its utility. It was compiled for the assistance of students, and to furnish a *rade-ecum* for the general practitioner, which would save the trouble of reference to larger and more elaborate works.

The author trusts that the present edition will prove even more useful than the past.

THE PARENTS GUIDE: or Human Development through Inherited Tendencies. By MRS. HESTER PENDLETON. Second Edition revised and enlarged. New York: S. R. Wells. 12mo. pp. 203.

The author of this work takes the ground, which we have again and again taught, that there are laws of hereditary transmission in the moral, as well as in the physical constitution. Noticing, many years ago, the marked diversity among her youthful companions, the question arose to her mind, why are some so upright that no evil influences touch them, and others so weak that they are at the mercy of every circumstance? Surely, she thought, it cannot be mere chance that one was born a fool, another a genius. Precisely what all the laws are that operate in those matters, she does not pretend to state, but in the discussion of those which are known she endeavors to facilitate the study of those that are hidden. Our readers will find much interesting matter on human development that will well repay a perusal of the work.

ESSENTIALS OF THE PRINCIPLES AND PRACTICE OF MEDICINE. A Handbook for Students and Practitioners. By HENRY HARTSHORNE, A. M., M. D., Professor in the University of Pennsylvania, etc. Third Edition, thoroughly revised. 12mo., pp. 487. Philadelphia: Henry C. Lea. Cincinnati: R. Clarke & Co. 1871.

It has not been many months ago since we gave this very useful little work a notice, but since then it has passed through another edition and comes to us much improved. In preparing this edition the author has taken great pains to supply omissions, and to add whatever has seemed to be most positive and important in the recent advances of medical science.

It is an epitome of the whole science and practice of medicine, and will be found most valuable to the practitioner for easy reference, and especially to the student in attendance upon lectures whose time is too much occupied with many studies to consult the larger works. Such a work must always be in great demand.

While brevity has been aimed at upon all subjects the most extended consideration has been given to those which especially require the at-

tention of the student, from their difficulty, comparison novelty, or intrinsic importance.

THE PHYSICIAN'S VISITING LIST FOR 1872. Twenty-first year of its publication. Philadelphia: Lindsay & Blakiston.

We have on our table a copy for the coming year of this excellent visiting list. Keeping up its popularity for a period of twenty-one years shows the high estimation in which it is held by the profession. Every physician should have one. It has the advantage over many others in that it is not swelled out to an inconvenient bulk by reading matter.

Editorial.

NOTICE.—We desire to remind our subscribers that the issue of one more number of our Journal closes the year, and therefore those who are in arrears should pay up. No medical periodical in the United States, or anywhere else, of its size, has given in the year about closing more valuable reading matter, and it should be paid for. It should be observed that each volume of the REPERTORY has been containing as much reading matter for a dollar and a half as any of the three dollar journals.

CINCINNATI HOSPITAL.—We are sorry to see an effort on the part of a number of the medical schools to break down the clinical teaching in this institution. We regard the policy as exceedingly short sighted, for we have not the slightest doubt but that it would, if successful, come back heavily on those who are engaged in it. No private hospital, in the very nature of the case, can afford the clinical advantages it does, and to break it down, if it were possible, would be to inflict the very greatest of injuries upon the interests of medical education of Cincinnati.

Last spring the trustees of the Hospital very properly passed a rule that all persons engaged in medical college teaching, should be ineligible for a position upon the staff. This action consulted for the interest of the schools far more

than it did for the Hospital, for it did away with the inequality of representation upon the staff with the ill feelings which it engendered and the bitter contentions so injurious to the colleges, and left the rivalry in the colleges to be in those things in which rivalry is honorable, viz: in efforts to afford to students the best course of didactic lectures. Students were kept away from Cincinnati on account of the acrimonious contest that was being waged in consequence of the unequal representation upon the hospital staff, and of course the schools suffered loss in the numbers in attendance upon their lectures; but now that the bone of contention has been removed and all are made equal as regards clinical advantages, the time and energy expended in strife can be employed in improving the the advantages of the respective schools, and thus hold out the highest inducements for medical students to seek our city for their education. Surely, it must be admitted by all that the action of the trustees of the Hospital, while it was a gain to the Hospital, was much more for the interest of the schools.

In the June number of the REPERTORY we set forth pretty fully the advantages to both colleges and hospital from selecting a staff from those physicians of the city who are not engaged in college teaching, and at the risk of re-

peating to some extent what we have just said we will mention them again:

1. Justice is done all the medical colleges by placing them on an equal footing as regards the public clinics to which they all have an equal claim—the building up of one institution at the expense of the others is done away with.

2. The members of the staff, freed from medical college teaching, will have more time to attend to clinical instruction and to the relief of the suffering poor under their charge. That a physician, young or old, can fully discharge his hospital duties who is employed much of his time in didactic teaching is simply not so—more or less neglect must follow, and more or less inhumanity result to the suffering inmates.

3. Great benefit will result to the Hospital as an educational institution—freed from partizanship, it will be neutral ground, and all the colleges can unite in advancing its interest.

4. Incompetent men will be gotten rid of. It is a well-known fact that there have been members of the staff possessing no higher qualifications than being members of a particular college faculty. There will be no necessity of retaining men on the staff for that reason. And, as the new rule of the trustees contemplates a re-election every year, there will be a good prospect of always having a first-class staff.

5. Students will have an opportunity of hearing more than one class of men upon the practical points of the profession, which will be a gain to them as much so as reading different authors upon subjects that do not involve pure science, and upon which all do not have the same opinion. An infusion of a due amount of skepticism into views that are not positively demonstrable is necessary to stimulate investigation, and this is best done by listening to the teaching of different men. Besides, a clinical lecture will not be made valueless to four-fifths of the auditors by its being made to illustrate

some pretended didactic lecture to one-fifth.

No private hospital can compete with the Cincinnati Hospital in its clinical advantages if due efforts be made to advance them and so far as we are aware everything is being done in that direction that can be done. No one can say but that the present staff, as a whole, is a good one, and will compare favorably with the staffs of the best hospitals of the country; and, besides, as all the members are engaged in no other teaching than clinical teaching, they are able to devote their whole time to it alone. As in a private hospital, some of them are not filling the chairs of chemistry, anatomy, physiology, etc., in a college, while in the hospital they teach clinical medicine, surgery, or obstetrics—the former being departments in medicine which have but little relation to the latter, but require much of the attention of those engaged in teaching them.

As regards the Good Samaritan Hospital, which is competing with the Cincinnati Hospital for the patronage of students, while everyone considers it undoubtedly a very worthy charity engaged in a good work, yet no one can truthfully assert that it affords anything like the clinical advantages of the Cincinnati Hospital. It has a good many patients, but a very large number of them are "pay patients," who have their own physicians, not members of the staff, in attendance upon them, and are not available for clinical purposes. When, therefore, college professors by representations, induce students to take the tickets of it in preference to those of the Cincinnati Hospital, they are consulting for their own interest to the injury of the interests of the students.

The Cincinnati Hospital occupies probably the finest hospital building on the continent of America, and is supported out of the purse of a great city. Not even the large fund obtained by the sale of tickets to its lecture rooms goes into its general sustentation fund,

but by law the whole is expended for apparatus, books, charts, and other means of illustration. The Good Samaritan Hospital, on the contrary, has no other resources for its support than the pay of its patients, the sale of tickets to students, and the donations of the charitable. What folly, then, is it to represent to students that it possesses clinical advantages that are to be compared in the least to those of the other institution. That it has clinics that can be studied with advantage by the student we have no doubt, and we are glad to number it among the institutions of the city where students can obtain practical knowledge, but all attempts to substitute it for the Cincinnati Hospital will result to the injury of medical education in Cincinnati.

What if it were possible, which it is not, that the lecture rooms of the Hospital should become closed for want of students to fill them? Would that affect the institution in its main eleemosynary purposes, for, like all public hospitals, it is only educational incidentally. Not by any means; for as we have stated its sustentation fund is not increased one cent by the fees of students. Closing it up, therefore, as an educational institution, would not be to cripple it in the slightest, but would result in destroying all the prospects of Cincinnati becoming a "great medical centre."

DR. WOLFLEY, a young physician of this city, has been appointed to assist Prof. Vaughan in the chair of chemistry in the Cincinnati College of Medicine and Surgery. Prof. V. having been engaged to deliver the lectures on chemistry in the Dental College, will lecture there, while Dr. Wolfley will deliver the lectures in the Cincinnati College.

DR. WM. P. THORNTON.—We should have mentioned in a previous issue the appointment of this gentleman to the staff of the Cincinnati Hospital, but inadvertently

neglected it. Dr. Thornton is an experienced physician, who has spent much time in the hospitals of Paris and Vienna, particularly those of the latter, and if he is not well qualified for the position to which he has been appointed it is certainly not from lack of advantages.

MALPRACTICE.—Our readers will find in this number of the *REPERTORY* a report taken from the *Journal of the "Gynecological Society"* of Boston of a singular case of malpractice, wherein a physician introduced a horseshoe pessary into the bladder instead of the vagina. How such a mistake could be made is beyond our comprehension.

It is very remarkable that the hero in the case is a candidate for the chair of genito-urinary diseases in a Cincinnati medical college. If he should be elected we will expect his lectures to be sought by those who desire to make a specialty of those diseases.

JOURNAL OF PSYCHOLOGICAL MEDICINE.—This very able quarterly for October is on our table. It is filled with its usual amount of valuable matter. So important is psychology to every physician that we do not see how any one can do without it. The price is five dollars a year. We will supply the *REPERTORY* and it for \$5.50—making the *REPERTORY* to cost but fifty cents.

HARPER'S MAGAZINE.—With the November number is concluded the forty-third volume of this highly popular magazine. Its immense circulation amounting to 130,000 copies, while it represents its unparalleled success, also enables the publishers to expend, for artistic and literary features alone, the sum of \$50,000 in a single year. With advantages possessed by no other periodical, it will continue to present its readers with a greater quantity of interesting matter and illustrations than any other magazine. All should take it. Price, \$4 a year. The *REPERTORY* and *Harpers* \$6.

THE CINCINNATI MEDICAL REPERTORY.

VOL. IV.

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No. 12

THE STUDY OF THE MIND.

An Address introductory to a Course of Lectures on Psychology and Diseases of the Nervous System.

By J. A. THACKER, M. D., Professor in the Cincinnati College of Medicine and Surgery.

GENTLEMEN:—The department in medicine which devolves upon my chair to give instructions in is that of psychology and diseases of the nervous system. They are oftentimes regarded as dry and uninteresting subjects—but why? Is it because they form a dry and uninteresting field of study? I think not, for they have to do with the noblest part of man—his mind; and is it not natural to presume that the higher the study the more interesting it will be? Is not the study of astronomy higher, and therefore more interesting, than many of the mere domestic arts, although they are worthy of observation? Where is there one who has gazed on the stars, watched their movements, studied their laws, but feels when he turns his attention from such contemplations to the providing for his mere physical wants, that his thoughts have descended to a lower plane and less pleasurable occupation, yea even to a distasteful one?

The study of the mind and of mental phenomena cannot be dry and uninteresting except to those to whom it is distasteful to think. Of course the higher faculties are called into operation—the individual must observe with accuracy, classify, compare, deduce, and form processes of reasoning; in fact, all the high intellectual operations must be called into action. Then to him who loves to think the study which it belongs to our chair to teach will be delightful; but to him who does not care

to delve for knowledge, and is content with the mere facts which force themselves through the external senses, without arrangement, without classification, without any of those processes which lead to the truths which those facts teach, will find it tiresome and insipid.

Says Mr. Morell, in his *History of Modern Philosophy*: "While, however, the spontaneous life has ever been that of the mass of mankind, there always have been minds that could not content themselves with knowing only the world of outward phenomena. Their mental activity having first gone forth to grasp the varied forms of the outward world, returned back, when it had accomplished this purpose, to inquire how the process had been managed, what were the powers of mind employed, and what confidence there is to be placed in the result. This process is what is properly termed *reflection*; and the reflective life, accordingly, is that which attempts to render a true account of the spontaneous life of man. The first man that *reflected* was the first speculative philosopher—the first time that ever thought returned to inquire into itself, and arrest its own trains, was the commencement of intellectual philosophy; and once commenced, it was inevitable that philosophy should continue as long as a problem was left in the mental or moral world to be solved. The primary efforts of reason to get at the grand principles of human knowledge were naturally weak and imperfect; but as reflection progressed the path became clearer, until some one individual of more than ordinary reflective power arrived, as he considered, at a solution of the main problems of human life, and sent it forth as such into the world. This was the first *system* of philosophy; and as successive attempts to do the same thing have differed in respect to their principles, their methods, their extent, and their results, so they have given rise to the different *systems* of philosophy, which have been thrown up to the light of day by the ever-flowing tide of human thought, and the ever-restless striving of the human reason."

Objectors urge against the study of mind that it is a part of speculative philosophy, the most profound students of which not unfrequently come to opposite conclusions. To be sure it does not belong to the exact sciences like mathematics, but the same may be said of a very large proportion of the acknowledged genuine branches of knowledge. Do the most profound thinkers

in politics always arrive at the same conclusions in their investigations, or are they not oftentimes in direct antagonism? Yet who will not say that the results of the investigations of these subjects are of the highest benefit, and lead to the enlightenment of the world, in fact make up the corner-stone of the liberties of the race, and ensure its freedom? Again, can the enunciations of the theologians be always accepted as infallibly true? In fact, are there not as many schools of theology as there are systems of philosophy, and do not many of them hold to dogmas that are diametrically opposed to one another? yet who would say that theology was not a legitimate study? Who would give up his Christianity because there are many different forms of it built upon the common data, on the ground of which all alike receive its general authenticity?

Says Mr. Morell: "Now, if we look back steadfastly upon the past history of philosophy, we may see that it has ever had a progressive development, that each age has contributed its portion, greater or less, and that the agitation between the different schools has been, as it were, the pulsations of this forward movement. Thales and Pythagoras combined the vague theories of their age into their own respective systems. Without the former Democritus and the Atomists would have been impossible; and without the latter, Parmenides and Zeno had never embodied in regular form the tenets of the Eclectic philosophy. The struggles of these two schools paved the way for Socrates, and thus rendered both Plato and Aristotle possible. Without the former of these the early Christian philosophy would not have seen the light; and without the latter, the scholastic philosophy could not possibly have arisen. But for the practical fruitlessness of the scholastic age, again, Des Cartes had not sought to re-cast the whole method of philosophical investigation; and without the results of the old organum before his eyes, Bacon had never framed the true. Had Des Cartes, moreover, or some equivalent mind, failed to point out the new road, Leibnitz had never trodden it, and the German Philosophy were still but a possibility; and had Bacon never shown the practical power of induction, Locke had never applied it to the study of the mind, or Newton, by its means, furnished the key to the temple of the universe. / As the course of the vessel that makes its way against the breeze consists of a series of movements,

each one of which seems to bear it away from the true direction, yet brings it in fact so much farther on its destined course; so the mind that can only view each individual tack which the philosophic spirit takes, is apt to imagine that every such movement carries it farther from the true mark, whilst those who can take the whole course in at one comprehensive view, see that these apparent deviations are all necessary to bring us nearer and nearer to the center of eternal truth."

Probably the chief obstacle in the way of the progress of the study of mind has been the adoption of the metaphysical mode instituted by some of the ancient Greek philosophers, as Plato, and in vogue to our day. By this method abstractions were made from the concrete—the simple deduced from the complex. Self-consciousness was therefore interrogated for our knowledge, and, of course, its testimony was regarded as infallible. Philosophers consequently groped along in darkness for centuries, learning, to be sure, but only advancing as the widening of the general field of knowledge enlightened the complex phenomena of their investigations. In fact, the advancement was more in the overthrow of false systems of philosophy than in the discovery of any new one. A new germ of truth, though, was now and then discovered, which will always last; "for the method of interrogating self-consciousness may be employed, and is largely employed, without carrying it to a metaphysical extreme. Empirical psychology, founded on *direct* consciousness as distinguished from *transcendental* consciousness on which metaphysics is based, claims to give a faithful record of our different states of mind and their mutual relations, and has been extravagantly lauded by the Scotch school as an inductive science."*

It is to the inductive mode of investigation that the great progress which has been made in recent years in the study of mind is due. "It is the fundamental maxim of this method that observation should begin with simple instances, ascent being made from them through appropriate generalizations, and that no particulars should be neglected." That Aristotle and others of the philosophers of antiquity did not pursue this most natural way of research was no doubt owing to their ignorance of anatomy. Although but little value was put upon life, yet the superstitions of the age precluded anatomical research, which

* Maudsley.

was necessary for a knowledge of those simple facts only to be obtained by a study of the nervous system, and without which there can be no inductive investigation of mind. "The barbarian's reverence for a dead body" no longer exists, and the difficulties in the way of anatomical dissections have been cleared away. The philosopher with scalpel, microscope, and any other aids he may have need of, can search the brain, the spinal cord, and nerve fibres at his leisure, and, learning their mechanism, deduce therefrom their offices; and thus, coming into possession of the simpler data, build up a system of mental philosophy having something like sure foundations.

What have our anatomical investigations taught us, seeing that we adopt the new inductive mode of studying the highest activity of man's life? It has taught us that the simplest form of the nervous system* consists of a ganglion and an afferent and efferent nerve, or of several such ganglia, having the same functions, united together by commissural fibres, so that all of them sympathize more or less in the changes that take place in any one of them. We find that the office of such a nervous system is simply inter-nuncial, excito-motor or reflex—that there is concerned in it neither sensation, consciousness, nor volition, or any of those psychical conditions that exist in ourselves or any of the higher animals. In a higher form we have near the entrance of the digestive canal a number of bodies of nervous matter, which serve as the center of organs of sense, and in the animals possessing it we find hearing, sight, etc., and such actions as are of a sensori-motor kind. In this higher form we find such higher actions as we would expect to find in their more complex nervous systems. Like the preceding, however, they must be accounted purely automatic, "since neither emotion, reason nor will has any participation in them."—"the type of psychical perfection among invertebrated animals, which is manifested in the highest degree in the social insects, being in the exclusive development of those powers in virtue of which each individual performs those actions to which it is directly prompted by the impulses arising out of impressions made upon its afferent nerves, without any self-control or self-direction; so that it must be regarded as entirely a creature of necessity, performing its instrumental part in the economy of nature from

* Carpenter.

no design or will of its own, but in accordance with the plan originally devised by its Creator." In other words, acting under particular circumstances according to the *property* inherent in it, as it is the property of the germinating seed, when buried in the ground, to seek the light.

Commencing thus the study of the nervous system, after the inductive plan, in the lower invertebrata, and ascending to the higher invertebrata, and also observing the actions of these animals in both series, must we not conclude with Mr. Maudsley, that with the increasing complexity of organization which marks the increasing specialty of organic adaptation to external nature, or, in other words, which marks the ascent in the scale of animal life, there is a progressive complication of the nervous system? In the one we have but a low order of actions, in the other, while they are still automatic, they embrace a wide range of instinctive actions, most perfect in their results; for instance, those of the honey bee, which gathers the sweets of the flowers, builds its combs according to the most exact rules of geometry, etc., in fact, executing very many complicated movements that would require deep reflection on the part of the human being, and yet without intelligence and without design on its part, except that design exhibited by the molecules of a salt in seeking each one its place in the forming crystal. "The very perfection of adaptation is often of itself a sufficient evidence of the unreasoning character of the beings which perform the work; for, if we attribute it to their own intelligence, we must admit that this intelligence frequently equals, if it does not surpass, that of the most accomplished human reasoner. These operations, too, are performed without any guidance from experience; for it can be proved in many cases that it is impossible for the beings which execute them to have received any instruction from their parents; and we see that they do not themselves make any progressive attempts towards perfection, but accomplish their work as well when they first apply themselves to it, as after any number of repetitions of the same acts."* They work in a groove, which however some men do; but they are not like some scheming plotters, "who waste a great deal of low cunning in efforts which a little larger view of things would render quite unnecessary." Without ideas, purpose, or volition, yet they are far

* Carpenter.

more useful than many of the human family, whose ideas, purposes, and volitions enact evil instead of good.

We say this much preliminary to endeavoring to show you that matter thinks.

[To be continued.]

THE NATURE OF PULMONARY TUBERCULOSIS.

By A. P. DUTCHER, M. D., of Cleveland, Ohio.

(Concluded from page 500, November number.)

IV.—SPECIFIC MORBID CONDITION OF THE BLOOD.

This theory attributes the foundation of tubercles to certain morbid changes in the natural constituents of the blood. The advocates of this theory contend, "that the blood is the seat of the process of deposition and absorption: and no matter how tuberculous it may be, so long as the balance between these processes are maintained, although the nutrition may be tuberculous, no tubercles are formed. Physiological chemistry appears to indicate of the blastema, as of the blood, that its pathological condition consists of some modification of the ultimate composition, of the relation of its protean-form or oleaginous constituents; their carbon, nitrogen, oxygen, or some radical and primary compound, being deficient or in excess; the modification, whatever it may be, rendering it incapable of forming perfectly nucleoli or germ-cells, or those, if formed, being inadequate to the perfect construction of the fibrin cells. Hence, instead of contributing to the formation and nutrition of the tissues, it becomes granular, and the granular matter is of a more solid structure than natural, less capable of absorption, and more apt to accumulate in masses than the constituents of healthy blastema. It thus becomes a foreign material, subject to chemical and physical changes."*

That the blood suffers some very remarkable changes in phthisis, is a fact which will not be disputed; and that these changes depend upon some morbid element introduced into it, is equally beyond dispute. And it is upon this special morbid element in the blood that the tubercular diathesis depends. Without this there could be no such thing as phthisis pulmo-

* Ansell, on Tuberculosis, page 573.

nalis, no more than there could be syphilis or syphilioma without a specific virus. And it would be a matter of great practical advantage if we were able to tell the precise condition of the blood upon which this predisposition depends. But it is too occult to be detected either by the microscope or chemical analysis.

Dr. Andrew Clark has frequently employed the microscope with this view, but has never been able to discover any difference in the appearance of the blood in the phthysical and those in health. These remarks apply to the first stage of the disease; in the latter stage there is a visible difference. The red corpuscles are often found deficient in quantity, and blighted in appearance. In very marked and rapidly fatal cases, they lose their characteristic form, and seem to melt into confused masses. But as the same thing occurs in other diseases, little practical value can be attached to it, especially when we are seeking to discover the nature of a disease so complicated as pulmonary tuberculosis.

In the September number, 1861, of the *St. Louis Medical and Surgical Journal*, Dr. S. R. S. Curtis has a very ingenious article on the *Pathology of Tubercle*, in which he attempts to prove that the blood has no direct agency in its formation, or that it is in any way at fault in this malady. We cannot quote all he has to say on this subject, but will present a few paragraphs to show his mode of reasoning.

In the course of his argument he says: "There is one other circumstance, of the greatest importance, which must not be overlooked, and which is applicable to tuberculosis as to cancer, and that is, the blood has no direct formative power in itself, and consequently cannot directly form even the simplest organ of the body, its purpose in this respect being to distribute through the molecular structure of organs the materials suitable for growth and development, which material is selected from the mass by the molecules, for the molecules have a discriminating power of selecting from the blood such material as is best suited for their growth and development, and rejecting that which is unsuited, and by them so elaborated as to enter into the formation, or subserve the function of the organs which they represent.

"Bearing upon this point, and in opposition to the doctrine

of 'free-cell development,' Virchow most ably remarks: 'Even in pathology we cannot go so far as to establish, as a general principle, that no development of any kind begins *de novo*, and consequently to reject the theory of equivocal (spontaneous) generation just as much in the history of the development of individual parts as we do in that of entire organisms. Just as little can we admit that *tænia* can arise out of *saburral mucus*, or that out of the residue of the decomposition of animal or vegetable matter an infusorial animalcule, a fungus or alga, can be formed: equally little are we disposed to concede, either physiologically or from pathological histology, that a cell can build itself up out of any non-cellular structure. Where a cell arises, there a cell must previously have existed (*omnis cellula a cellula*), just as an animal can spring only from an animal, a plant only from a plant. Consequently, we cannot regard cancer or tubercle as the direct result of a depraved condition of the blood, without claiming for the blood a direct formative power, or without denying to the tissues their property of discriminative selection, either of which positions would be contrary to the known and acknowledged principles of physiology.

"That the materials of which these normal products are formed is derived from the blood we would not be understood to deny; but we claim that such material is derived from normal healthy blood, and not blood in a depraved condition. The same blood, for instance, which supplies to an abnormal malignant growth the material for development, supplies to all organs of the body healthy materials for growth and function. In other words, this morbid condition of vitality, having once become established in a given organ or part, possesses in its ultimate structure the same power of discriminating and selecting from the blood the matter they require, as the molecular structure of healthy tissues. The same condition is observed in the vegetable world. From some cause an excrescence begins to form on a tree or plant. This unnatural action having once been established, for years, or perhaps during the whole life of the tree or plant, this morbid growth derives from the healthy sap the materials for its increase, just as the body and branches derive their support from the same source."

This theory of Dr. Curtis' looks very plausible. But his reasoning is altogether too hypothetical. If cancer is not a

blood-malady, will he, or any of the advocates of this theory, have the goodness to tell us why it is, that after removing the original seat of the malignant deposit, it will in almost every case re-appear in some other locality? Take as an example a scirrhus breast. Let it be amputated to day—every vestige of the local disease be removed. In three weeks the wound is perfectly cicatrized, and the patient is dismissed. In six months she returns, the constitution malady has reappeared; now it is in the axilla, submaxillary glands, or lungs. The cicatrix on the breast looks healthy. The parts above named have become the scavengers through which nature seeks to eliminate the depraved products; but they are insufficient and death speedily claims his victim. I have known more than thirty cases of this kind; and my experience may be quite different from other physicians when I record the fact that I never knew a case of scirrhus cancer cured by extirpating the local disease. It has always reappeared with redoubled activity, and terminated the individual's life much sooner than if no operation had been performed. And the same is, to a certain extent, the case with tubercular disease. When it is arrested in one organ, it will not unfrequently speedily make its appearance in another, manifesting, beyond all controversy, that the trouble, whatever it may be, is not local, but constitutional—a specific blood malady, which in the present state of our pathological knowledge cannot be defined.

One of the strongest arguments, however, which can be found to prove that tuberculosis depends upon a specific morbid condition of the blood is the antagonism which exists between it and cancer, proving very clearly that they are both specific diseases, and that there is no relation between them. And that when they both exist in the same system, the one or the other will be the preponderating disorder, just in proportion as they are supplied by the blood with appropriate material for their development and growth. Sir James Paget, in his lectures on *Surgical Pathology*, page 159, presents a very remarkable case illustrating the incompatibility of tuberculosis with cancer. He removed the breast of a young woman, including a large mass of well-marked scirrhus cancer. Six months after the operation the disease reappeared in the scar and in the axillary glands. For twelve months it made considerable progress, not only in

the parts just named, but in other portions of the body. Suddenly the cancerous disease commenced to decline. The patient in the mean time lost strength, became thinner, gradually sinking, and died with marked symptoms of pulmonary tuberculosis. On post-mortem, the lungs contained no cancer, but were full of groups of grey succulent tubercles, and greyish tuberculous infiltrations in every part except their apices, where were numerous small, irregular tuberculous cavities. "The contrast was so striking," says Paget, "in this case between the appearance of active recent progress in the tuberculous disease, and of the opposite course in the cancerous disease found after death; and I can hardly doubt that, during life, the progress of the one had been at first coincident, and then commensurate, with the regress of the other."

Sir James also details a case in which active tuberculous disease of the lungs was arrested immediately before the appearance of scirrhus in the breast, which would lead us to conclude with much certainty, that there is a marked incompatibility between the two morbid conditions. Some writers fancy an identity between syphilis, cancer, and tubercle—syphilis the parent, cancer and tubercle the offsprings. The idea is a delusion, and, in a practical point of view, has led to the most disastrous results. The conversion of one specific disease into another is contrary to the laws which govern all specific morbid diseases. It is true syphilis may act as an inducing cause of phthisis, but to say that there is any identity between them would be about as rational as to affirm that there is an identity between small-pox and scarlatina.

V.—IMPERFECT INNERVATION.

This theory of pulmonary tuberculosis starts out with the idea that the primary cause of the disease consists in a morbid condition of the nerves of organic life, and as a consequence of this the blood becomes unfit for healthy nutrition; and, in persons predisposed to phthisis, tubercular matter is eliminated in the lungs, and, although the morbid product thus deposited in the lungs may be traced directly to the blood, yet the primary cause of the whole trouble is imperfect innervation.

"Faulty innervation of the pneumogastric nerve is the primary cause of pulmonary consumption," exclaims a grandilo-

quent medical writer. "Can we prove it to be so? Yes we can beyond the shadow of a doubt, if the cause of any other disease can be discovered by the process of rational induction. This nerve supplies the stomach, lungs, larynx, and œsophagus with their principal nervous power, and they are the first to show signs of any abnormal condition in the incipient stage of the disease, the symptoms of which occur a long time previous to the localization of tubercles—even previous to the appearance of hæmoptysis, and are manifested by imperfect digestion, quickened respiration, weakness of voice, and occasionally difficulty of deglutition. Simultaneously, or probably previously, there is an abnormal quantity of phosphoric acid set free from the economy. Now, we cannot say for certain that this acid is the product of diseased nervous structure; but one thing is certain, it detracts from the nerve-power of the entire organization. We cannot say either whether it is the cause or result of nervous disorder, but in all diseases of the nervous system it is discharged in unusual quantities."*

This theory of pulmonary tuberculosis might perhaps pass the ordeal of criticism without harm, were it not for the fact that tubercles are frequently found in parts over which the pneumogastric nerve has no control. I now have before me a specimen of tubercular matter found in the Sylvian fissure of the brain of a boy fourteen years of age. If the above theory was correct, this deposit should have been in the lungs or stomach. But this theory is not tenable either by the physiology or pathology which obtain in this case. If there is any want of innervation, it must be one of the effects and not the cause of the disease. Just as we have maintained in another article, in relation to the menses, they cease not from any disease in the organs of generation, but from a failure of the vital fluid which nourishes and sustains them, hence we do not consider their suppression a cause of tuberculosis.

In phthisis pulmonalis we are not willing to admit any want of innervation. According to our observation the nervous system generally maintains its integrity until the last. The brain, in particular, appears to be exalted in its functions, and the mind is frequently exceedingly brilliant. There appears to be no depression of the nervous powers—this indeed is one of the

* Dr. F. A. Anderson in the Cincinnati Medical and Surgical News for June, 1861.

most distinguishing characteristic of this dreaded malady. If it originated primarily in the nervous system, this integrity of functions would not form so marked a feature—organic lesions and functional derangements in the nervous system would always be found as necessary concomitants, which is not the fact.

VI.—RETROGRADE METAMORPHOSIS OF THE TISSUES.

This theory of the origin of tubercle ascribes it to a retrograde metamorphosis of the tissues, in which the lower grade of cell-growth takes the place of the higher; and, as a consequence, tissues are not only imperfectly developed, but there is likewise a retrograde action manifest. Thus, cells of a lower grade of action take the place of the higher or coherent cells, and the tissues are constantly degenerated.

Dr. L. M. Lawson, in his *Practical Treatise on Phthisis Pulmonalis*, favors this theory. On page 165 he says: "Taking all these facts into consideration, I am led to the conclusion that tubercle is almost of necessity the product of the metamorphosis of the tissues. It is here, and here alone, that we find those important changes taking place which result in new combinations, chemical and organic, and which, passing into the blood, lead to local disease. This may be termed a *diathesis* when it is the result of a peculiar constitutional conformation, which, by its own natural tendency, eventuates in a specific form of disease."

That the solid tissues have anything to do with the originating of the tubercular element we cannot admit. They have no more to do with it than they have to do with originating the red corpuscles of the blood. It is true there may be a defect in the original cell growth, which may interfere with the healthy nutrition of the tissues; but tubercle is a kind of matter which cannot be incorporated into the cell-tissue of any part; indeed, it may exist in the blood for months before it is deposited in any organ. When thus deposited it is an exudation from the capillary vessels, and this is confirmed by the fact that tubercle, when thus found, is at first in a semi-fluid, transparent state, "confined exclusively to the interstices of the tissues; or, in other words, that it is an extravascular deposit, filling up the tissues, and investing them as closely and firmly as the stones of a wall are by the solid mortar which has been applied between them."*

* Vogel's Pathology, p. 225.

Whatever retrograde metamorphosis takes place in the tissues is produced by this foreign matter, and it has been proven that whatever tubercle has been deposited in the tissues of an organ, it must sooner or later produce its dissolution: this is its general sequence.

But physicians may reason as they will in regard to the origin of tubercles in the lungs, they cannot close their eyes to the fact that there are certain morbid changes in the blood which render it unfit for healthy nutrition; and that when thus affected it leads to the exudation of tubercle in the lungs or some other organ; and that when thus deposited, it is not capable of being assimilated into the texture of the organs; and, if not absorbed, it sooner or later produces their dissolution and all its attendant phenomena.

This is now the generally received opinion among medical writers as to the origin of pulmonary tuberculosis, and all of our most scientific physicians, both in this country and in Europe, base their treatment upon it. We cannot enter into a full description of this theory, for our article has already passed far beyond the bounds prescribed in our original plan. We will, however, explain it as briefly as we can, avoiding technicalities as much as possible.

In order, therefore, to understand the whole process of tubercular disease, it must be considered in connection with the various manifestations displayed in the process which originates organized tissues. It is a conceded doctrine with modern physiologists that the primitive structures of all the tissue of the human body is composed of minute cell-formations and cell-germs; and these cells are capable of reproduction so long as they are supplied with blood that is appropriate for their formation. When therefore all the organic functions are properly performed, and the body is in a normal state, there is always a continual disintegration and reproduction of cell-structures. Thus, while on the one hand there is a process continually going on in the body which destroys, there is another which builds up and repairs.

So long, therefore, as these two processes are thoroughly maintained, there will be health in all the various tissues of the body. Nothing can interrupt it but a material diminution of the original cell supply, which depends upon a normal performance

of the functions of nutrition. Hence we trace all the primary forms assumed in the process of developing solid animal tissues to the blood, thereby assuming for the circulating fluid a power of such great importance that without it all the vital changes must cease.

Now, in pulmonary consumption it has been clearly demonstrated that from a failure in some of the blood-making or blood-purifying organs the blood loses its normal constituents. The beautiful harmony and perfect relation which existed between it and the tissues have departed. The rich materials formerly abounding in it are no longer to be found; the cell-germ, which, in a healthy state, was conveyed to the remotest tissues and deposited as the nucleus of a plastic structure, has been replaced by one of the lowest and most degenerated materials ever formed in the human body, not capable of the least organization, nor contributing in any way to the nutrition of the parts in which it is deposited; but, on the contrary, is disorganizing in its nature and tendency,

It is a fact which cannot be denied that, in this instance, the healthy process of nutrition has undergone a perfect change; the plasticity of the blood has degenerated into a depraved habit, and the plastic forces, instead of compliance with the laws of normal organization, are now subject to a great deviation. If we reflect how injurious to the organs of the body must be the effect exerted through the blood thus degenerated—if not positively vitiated—carrying to all the tissues of the body materials of a very destructive character, we may easily understand why it proves so injurious to the lungs and other vital organs.

In this way the system not only sustains a negative injury in the arrest of plastic forces, in consequences of the notable deficiency of organizable constituents, but a positive evil resulting from noxious elements present, demanding their speedy exit; and the organs evincing the greatest proclivity to participate in the progressing decay become the receptacle for the depraved product. And observation has certified the fact that the lungs are the organs most frequently selected, particularly in the adult, for the purpose of eliminating this offending matter from the organization.

Now if we contemplate for a moment how vitally dependent upon the integrity of the pulmonary functions is the adequate

preparation of the blood for the use which it is destined to serve in the system, we at once have a direct clue to the series of perverted actions and torpid functions made manifest. The abnormal elements which give rise to the depraved blood, finding efficient scavengers in the lungs, the vitalizing functions become impaired in consequence of the impediment offered to the respiration by the accumulation of tubercular deposits, which, still further depraving the quality of the blood, accelerate the formation of morbid matter, thereby increasing the burden of the lungs, and thus becoming cause and effect, until the elaborating process is paralyzed, and nutrition permanently arrested.

If we admit this theory of the formation of tubercular deposits, we may readily explain why it is that the lungs are the most liable of all the organs of the body to tubercular disease. They are the chief organs for the purification of the blood; anything that tends to check this process, and arrest the free circulation of the blood, must have a direct tendency to produce an elimination of the morbid product. Hence the apices of the lungs, from being enclosed in a less yielding part of the chest, mechanically favor the effusion more than the lower lobes.

From a careful review of this whole subject we think we are fully warranted in drawing the following conclusions:

1. That pulmonary tuberculosis is a specific disease, depending upon a morbid condition of the blood, which leads to a discharge of some of its depraved constituents on the external surface of the air cells, and under the basement membrane.
 2. That this morbid matter is not capable of being assimilated into their textures, nor in any way contributing to their growth or maintenance, and ultimately leads to their dissolution and all its attendant phenomena.
 3. That the tubercular diathesis increases, and is attended with cachexia, which is often disproportionate to the local disorder, thus clearly proving its specific and constitutional origin. Tubercular disease may, however, sometimes cease in part, yet if we look to its fearful mortality as an index of its natural course, we may see in it a law of increase like that exemplified in some of the more malignant disorders, such as cancer and the like. And such a law is not exemplified in ordinary local diseases, for they generally tend to subside with the lapse of time.
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A REMARKABLE CASE IN OBSTETRICS.

By J. TRUSH, M. D., of Vienna, O.

ED. REPERTORY.—The fact that every general practitioner is called upon to devote a greater or less share of his attention to the practice of obstetrics is, I trust, sufficient excuse for reporting the following case.

On the 4th of October came into the lying-in-department of Prof. Carl Braun, a woman, aged 35 years, at the full term of her seventh pregnancy. Three days later labor set in; the attending midwife examined the patient, found the presentation somewhat abnormal—the head and one hand presenting—and at once reported this to the professor's assistant, adding that the membranes were intact, and the pains light. The assistant, being on his usual morning rounds through the wards, did not consider the case of sufficient urgency to forbid finishing the visit, and hence proceeded. In a few minutes, however, the midwife returned with the statement that, during her absence, rupture of the membranes had taken place—said to have been occasioned through examination by some enterprising student—and that now the right shoulder was the only presenting part, the head having passed up into the left iliac region, the back being anterior, towards abdomen of mother. The assistant now lost no time, but repaired at once to the bedside of the patient, found the position of the child as reported, and in addition that the uterus was in a state of tetanic contraction, so that turning without chloroform was not to be thought of. The patient was therefore placed thoroughly under the influence of this anæsthetic, with the effect of producing a very slight relaxation of the uterus, barely sufficient to enable the operator, after a protracted effort, to get hold of a foot; in bringing this down into the vagina, the arm corresponding to the presenting shoulder and the cord also followed. Traction, strong traction was now made from the foot, while the shoulder and head were pushed upward with the expectation of being able to complete the version, but all to no purpose, the uterus held its contents with a grip of iron. By this time too the pulsations in the prolapsed cord had ceased, the child was dead.

Not deeming it prudent to institute further operative proce-

dure without first informing Prof. Braun of the state of affairs: this gentleman, on being informed, said that he would look after the patient himself. In an hour or so he came, found uterus as firmly contracted as ever, and conditions in other respects as described. He expressed the opinion that decapitation of the child was the safest and quickest method of relieving the mother. This operation he expected to execute in the following manner: he would introduce his left hand into the vagina, push thumb and one or more fingers onward into the uterus, grasp the child's neck, and, under guard of the fingers, apply the decapitating hook—Stumpfer Schlüsselhacken—to the neck, luxate the spine, and twist off the soft parts; extract the child's body and last its head.

The patient was now again chloroformed. Before resorting to the hook, however, the Professor also tried to complete the version, but with no better success than his assistant; he therefore proceeded to operate as above indicated. He introduced his left hand, tried to get hold of the child's neck, but failed; six or eight times he repeated the attempt with a like result. The child's head was pressed so firmly upon its chest that the hand could not pass between them up to the neck, which latter was curved upward and forward against the abdominal parietes of the mother. What was to be done? The mother must be delivered somehow or other. Perhaps if the arm and cord were not in the vagina, the proposed operation might yet be possible. These parts therefore were removed, the arm with shoulder by means of the decapitating hook. This operation also opened the thorax of the child. Once more a strong pull was made from the presenting foot, conjoined with external manipulations, and see, the breech of the child moves downward, and is brought into the world in a few seconds; but the head will not follow, it is still a prisoner in the uterine cavity, the outlet of which can be felt encircling the neck of the child like an elastic cord. However, after a pause of some ten minutes, the Professor succeeded in delivering the head also. The placenta followed in a few minutes. The whole operation had lasted upwards of an hour, perhaps an hour and a half, during which time the patient had been constantly, most of the time profoundly, under the influence of chloroform.

Prof. Braun subsequently stated that for fifteen years he had

had no similar case; he had met with shoulder presentations, had likewise encountered tetanus uteri, but in none of these had he found such a combination of aggravating circumstances.

Relative to the cause of tetanus uteri in the case under consideration, he was utterly in the dark; of one thing only was he certain, viz. that it was not brought about by ergot, or any other drug or this class. In her six previous confinements the patient had had nothing of the kind; and in this her seventh labor, the entire severe operative procedure might doubtless have been averted, had the mal-position been corrected at the proper time, i. e. as soon, or even before, labor commenced. Taken in time, continued the Professor, before rupture of the membranes, versions are of easy execution; while subsequently, especially if a considerable time has elapsed since escape of amniotic fluid, they are with right reckoned among the most difficult obstetric operations.

To-day, ten days after the operation above described, this patient walks about the room, and is already anxious to return to her work.

FOUR KIDNEYS—WITH REMARKS UPON THEM,

By M. L. AMICK, M. D., Demonstrator of Anatomy in the Cincinnati College of Medicine and Surgery.

GENTLEMEN: Last night when we removed the viscera from this subject, we had presented to our view one of the freaks of nature. We beheld four kidneys lying in the abdominal cavity, two upon either side of the vertebral column, and by close inspection we could trace two ureters upon each side, passing down into the pelvic cavity, and disappearing behind the bladder. As we did not have time to remove them last night, we will now proceed to their removal. First you will observe that the subject before us is a male, and in all probability an European by birth; his age we should judge to be over forty; his weight, at least two hundred and thirty; he has an abundance of adipose tissue, and presents the appearance of a man who has consumed a great deal of porter. In our examination of the brain we found nothing abnormal, except the absence of the commissure mollis and pineal gland; the ventricles contained

the normal amount of fluid. The heart and lungs natural; the liver very large, and the stomach large enough to contain nearly eleven pints, by measurement. As we lift this mass out of the left abdominal region, and remove the fat and peritoneum, we behold two well formed kidneys, with two pelves and an ureter descending from each pelvis; we also notice that the lower portion of the upper kidney is attached to the upper extremity of the lower kidney, and, were it not for the two distinct pelves and two ureters I would term it only one kidney; but upon a close examination we are assured that we are justifiable in calling it two distinct kidneys. Upon moving the mass from the right lumbar region, and cleaning off the tissues, we find two kidneys with their pelvices and ureters upon this side. We now proceed to remove the urinary bladder, and inject it with wax; we then trace the ureters down, and find that they enter the muscular coat of the bladder separately, traverse downward, inward and forward, about an inch between the muscular and mucous coats, then open into the bladder by four separate orifices.

The kidneys are of the shape of a bean of that name,—uniform, and are situated in the lumbar region, one before each side of the spine; they lie imbedded in more or less fat, on the quadratus and psoas muscles, nearly opposite the two lower dorsal, and two upper lumbar vertebræ; on the top of each is a little body like a cocked hat, called the renal capsule. Though this is their general situation, still they are not always there. Cruveilhier found both kidneys in a woman, in the true pelvis, behind the rectum. The right kidney of females who wear tight corsets, is often found in the right iliac fossa, the stays pressing upon the liver, and the liver being driven downwards, forces the kidney down. M. Boynet, also makes mention of kidneys in the pelvis. Horner recites a case, where one kidney was in the pelvis, in front of the rectum. Richardson, of Louisiana, says: "It is not uncommon to find one or both in the iliac fossa, and more rarely in the cavity of the pelvis, sometimes both are on one side."

They are sometimes so displaced by tumors as to constitute hernia of the kidneys, as referred to by Haller and Portal.

Velpeau and Rayer, speak of movable kidneys.

NUMBER.—In man there is normally only two kidneys; but cases are recorded where there was an entire absence of the kid-

neys, where there was only one, and where there was three or more. You have a case before you where there are four.

The entire absence of the kidneys has been noticed by several pathologists; Odhells, Everhard, Gilbert, Mayer and others record the entire absence of the kidneys, in some fœtuses. Beclard mentions that they are often entirely absent in acephalous fœtuses; but one or both may exist when the spinal cord is present. One kidney is often absent, while it is not uncommon to find both united, by a transverse band crossing in front of the vertebral column, and forming what is known as the "horse-shoe kidney," so much alluded to by Ploucquet and Rayer. Blassius, Follopii and Govard, relate cases of three kidneys.

SIZE.—The kidneys are not subject to such great variation in size as the other organs, (thus the spleen has been known to weigh forty-three pounds, while the kidney falls far short of that.) The *American Journal of Medical Science* makes mention of the left kidney of a female, aged thirty-five, that weighed seven pounds. Gross mentions a serous cyst in the kidney of a man, aged twenty-five, that had two gallons of pus in it; but this was not an enlargement of the kidney proper. The kidney often becomes atrophied until it weighs scarcely a drachm.

FUNCTION OF THE KIDNEYS.—The kidneys remove much of the fluids carried into the blood, and much of the effete material, the result of the waste of the tissues, and other substances, resulting from indigestion and mal-assimilation; and so long as they discharge their functions, an excess of the fluid elements of the blood, and of the various saline and nitrogenous materials are prevented from accumulating in the blood. The kidneys are intimately associated with the digestive and assimilative viscera, through the medium of the ganglionic, or organic nerves; with the circulating organs by the state of the blood; and with the cerebro-spinal nervous system, by means of the spinal nerves communicating with the renal ganglia and plexuses. The kidneys are liable to be deranged sympathetically, or indirectly, during the progress of the various diseases, by which their important functions are affected. As they are the chief emunctories of effete and hurtful matter, the ultimate products of assimilation that are liable to accumulate in, and require to be carried out of, the circulating fluids, they may be disturbed by the

superabundance and peculiarity of the material secreted. They perform their office by nervous influence, combining the substance they eliminate into new forms, which are frequently of an irritating, and of a hurtful nature. Vicarious causes often effect them through the medium of the skin, lungs, liver, digestive canal and generative organs. Tubercles are seldom found in the kidneys, though as many as five hundred have been observed by Gross, from the size of a millet seed, to that of a pea. Worms are occasionally found in the kidneys, the *strongylus*, *gigas* the *dactylius aculeatus* and the *spirotera hominis* are found in these viscera.

Urinary calculi are formed first in the kidney. They proceed from the elementary principles, which are in a state of solution in the blood, and its fluids, and when brought in contact with an indissoluble basis, they fix themselves there as a deposit, that, by accretions, forms the calculus, which continually increases in bulk, passes through the ureter to the bladder, and, if not voided in micturition, remains there, receiving the addition of fresh calculi matter, until it attains an enormous size, if not removed. Earle makes mention of one that weighed forty-four ounces; Lister mentions one that weighed fifty-one ounces; Morand one that weighed six pounds and three ounces; Buffon makes mention of a urinary bladder, that contained fifty-nine calculi. The composition of these urinary calculi are very different when subjected to chemical examination.

The kidneys are possessed of a very low degree of sensibility, due, no doubt, to their protected condition. By a vertical incision through one of the four kidneys that has been removed this evening, we are unable to detect any abnormality. By placing the cortical portion under the microscope, we see the tubuli uriniferi and malpighian bodies, presenting no unnatural appearance.

**OF DEGENERATIONS PRODUCED BY ACUTE DISEASES,
And their Consequences from a Clinical point of view.**

By M. A. LAVERAN. Translated from the "Archives Generales," by
THOMAS C. MINOR, M. D.

The question of degeneration of certain anatomical elements (muscular fibres, small blood vessels, etc.) in acute diseases,

has only been studied up to the present time from a histological point of view. I propose to inquire, in this article, what influence these lesions may exercise upon the progress and termination of diseases.

I.—DEGENERATION OF MUSCLES IN ACUTE DISEASES.

In 1864, Zenker described two kinds of muscular degeneration in typhoid fever, under the names of the granulous form, and of the cirseuse form. This distinction must be abandoned. The granulous form is only the first stage of cirseuse degeneration, better called vitreous by Weber, and better still granulo-vitreous by W. G. Hayem in his excellent memoir upon the symptomatic myosites (*Archives de Physiologie Normale et Pathologique*, 1870).

We can distinguish three stages in the alteration of muscles:

First Stage.—The muscles are red, hard, debilitated; sometimes the muscle loses none of its normal external characteristics. Under the microscope the muscular fibres seem tumid, their contents granulous: at certain points the normal striates have completely disappeared; at other points we still find traces of them. At points the fibres present incomplete breakages, which mark their frailty.

Second Stage.—The muscles become pale; they are dry and friable. Under the microscope we find that the fibres are unequal, tumid at certain points, compressed at others; at the level of the distended ones we find small bunched masses, sometimes entirely transparent, (vitreous masses of Weber,) most often transparent at some points only, granulous at others. Among the tumid ones the fibres are granulous; they present numerous breakages; here and there we still find traces of normal striation. It is rarely that the alteration affects all the fibres of a muscle.

Third Stage.—The muscle becomes more palid; it assumes a yellowish death-like tinge and a waxy aspect; it becomes still more friable than in the second stage. The histological structure of the muscle is greatly modified, and we can only distinguish from thence the granulo-vitreous masses in juxtaposition. Some muscular fibres are completely emptied and reduced, by the sheath of the envelope; the majority enclose a great number of granulo-vitreous masses. The nucleus of the fibres and cellules of the perimysium are seen proliferating. Some authors think that it is at the expense of these cellules of new formation

that the muscular fibres regenerate themselves. Nothing proves that the myeline cannot be reproduced in the sheaths of altered fibres, by the aid of a kind of secretion; without this the proliferation of cellules and sheaths becomes necessary. This is certain, however, that when one makes an autopsy on an individual who has died of typhoid fever, we find the muscular fibres much diminished, slightly striated. We have never met muscular fibres filled with cellular elements.

The alteration of muscles is met in a great number of acute diseases. M. Hayem has noted it in variola in twenty-two out of twenty-four cases; in scarlatina one time in one case; in measles two times out of three cases; in miliary tubercle (acute) three times out of three cases; in jaundice (grave) two times out of two cases; in erysipelas (ambulant) with meningitis one time out of one case; in tuberculous meningitis one time out of two cases; in puerperal fever with metastatic abscess one time out of one case; in phlegmonous parotiditis one time out of one case. Hoffmann has seen several times in cases of pneumonia a waxy degeneration of some of the muscular fibres of the thoracic and abdominal walls.

On my part I have observed the alteration of muscles: in typhoid fever nineteen times out of twenty-one; in variola six times out of ten; in scarlatina three out of three; in acute tuberculosis two out of three.

It is upon the bodies of persons dying of typhoid fever that we meet most often the very extended and very advanced granulo-vitreous degenerations; in small-pox and in scarlatina death supervenes too rapidly for the alteration of the muscles to pass beyond the first stage; so in these diseases the granular degeneration is more common than in granulo-vitreous. Once only out of six cases of variola have I found the muscular system altered. The granulo-vitreous degeneration was comparable in all points to that which is observed among patients dying at an advanced period of typhoid fever. It is in scarlatina that the degenerations have seemed to me to be produced most rapidly.

My researches have led me to investigate a great number of muscles; those that I have found most often altered are by order of their frequency: the psoas, pyramidalis, adductors, pectoralis, intercostals, the external and internal oblique with the transversalis of the abdomen, the diaphragm and heart. In

the fibres of the heart no oftener than in those of the muscles of the larynx and pharynx, I have never met with vitreous masses, but only the granular degeneration. Mr. Hayem observed in one case the granulo-vitreous degeneration of the fibres of the heart. I have several times examined fragments of the muscles of the arm and forearm, and have always found them striated as in the normal state. The muscles having ribbon-like fibres have not appeared to me to participate in the alterations of the muscles with striated fibres.

The alteration of muscles may bring about local accidents long since known. The muscles become friable, may be break. This may produce hæmorrhages in their sheaths. Hæmorrhages in the sheaths of muscles have been described by Cruveilhier and Rokitsky. Finally, it may form deep abscesses in the interior of muscles.

Degeneration of muscles is not the cause of the great weakness which accompanies typhoid fever at its *debut*; even as Trousseau remarked the fact, muscular lesions have not yet had time to be produced; but it is probable that the alteration of muscles causes the weakness which accompanies the convalescence of typhoid fever, and which is so long in dissipating itself.

The pectoralis, intercostal, diaphragm may, in particular, be attacked, from whence the considerable obstruction in the respiratory function. The alteration of the muscles of the abdominal wall, so constant in typhoid fever, contributes also to the obstruction in respiration.

We do not pretend that the alteration of the muscles of respiration by itself brings about death. It is very rare that it should be decided as that, but this alteration contributes to the obstruction of respiration; it prevents expectoration, favoring hypostasis. It is this which seems to us to have taken place in the following observation:

OBSERVATION, I.—B——, aged 22, saying he had been sick eight days, entered the Hospital St. Martin, the 1st of June, 1870. (Service de M. le médecin principal, coindet.)

Fever very severe and prostration slight, diarrhea, meteorism, gurgling and pain on pressure in the right iliac fossa; roseate spots in great number upon the trunk. Slight bronchitis. Soup, milk, gum water.

The 17th, the state of the patient is satisfactory, the fever is

still high, but the prostration is not too great, intellect clear, the belly soft, diarrhea moderated, bronchitis slight; inspires not in quietude.

18th.—Since yesterday evening the dyspnœa has very sensibly increased, the pulse is small, frequent. Auscultation does not reveal to us the cause of the dyspnœa. Dry cupping.

19th.—The dyspnœa has increased; the face and the lips are cyanosed; pulse thread like, impossible to count. Blister on the front of the chest. The patient died the 19th, at one and a half o'clock at night.

Autopsy performed on the 21st, at eight o'clock in the morning.

Skull.—A little sub-arachnoidean serosity, small sub-arachnoidean ecchymotic spots at the posterior part of the left hemisphere.

Thorax.—Heart voluminous; the right ventricle and the corresponding auricle containing a great quantity of black liquid blood, the lungs are voluminous; moderate nupostatic congestion; the bronchial mucous membrane is hyperæmic and covered with mucus.

Abdomen.—Two of Peyer's patches only and some isolated follicles are ulcerated in the small intestine; the ulcerations are well cleansed; the mesenteric ganglions are hypertrophied; the spleen is voluminous, softened.

The Great Recti.—Muscles of the abdomen and psoas are discolored, waxy—under the microscope, we determine a very advanced (third degree) granulo-vitreous degeneration, extending to almost all the fibres. The pectoralis muscles, intercostals and diaphragm present the same alteration, though to a more slight degree.

Finally, the fibres of the heart are granular; but this last alteration is slightly characteristic.

OBSERVATION, II.—D——, aged 23 years, soldier of the line, entered *l'hospital St. Martin* the 17th of June, 1870, saying he had been sick eight days.

When the patient entered, the fever was not very high, but it soon increased, and on the 30th of June, the patient presented all the symptoms of typhoid fever; prostration, high fever (39 degrees in the morning, 40 degrees in the evening), diarrhea, meteorism, slight pain on pressure and gurgling in the right iliac fossa; disseminated bronchial rales on both sides of the chest.

Soups, gum water. Potion of extract of quinquina, 4 grammes. Repeated applications of dry cups over the chest.

July 5th.—Pulse 100, and respiration 24 in a minute this morning; the thermometer marked 39 degrees 3 minutes, 40 degrees in the evening; the state of the patient is very satisfactory.

6th.—Respiration is a little more difficult and more frequent, 24 inspirations per minute and 104 pulsations; the thermometer marked 39 degrees 4 minutes in the morning; the bronchitis has slightly increased in intensity. Dry cups. Potion of 0 gr. 30 of kermes.

9th.—Respiration is more and more embarrassed, the patient cannot expectorate; in the evening, the thermometer marked 40 degrees 2 minutes.

10th.—Extreme dyspnoea, face cyanosed, nostrils dilated. Large blister upon the anterior portion of the chest. Patient died at one o'clock at night.

Autopsy performed the 12th, at eight o'clock in the morning.

Thorax.—Lungs voluminous, hypostatic throat obstructions, hyperæmia of the bronchial mucous membrane; small nucleus of red hepatization at the anterior and superior part of the left lung; heart healthy, liquid blood in very great abundance in the right ventricle.

Abdomen.—In the small intestine, we only find one of Peyer's patches ulcerated, the others are hardly projecting; the mesenteric ganglions are hypertrophied; the spleen, doubled at least in volume, is soft; liver and kidneys normal; the psoas and rectus of the abdomen have undergone granulo-vitreous degeneration; the pectoralis only presents a slight granular alteration, but the intercostals and the diaphragm are greatly altered; under the microscope, these muscles present a very remarkable hyperæmia, we would say that they had been injected; almost all the fibres have undergone the granulo vitreous degeneration (second stage). The inner fibres of the sheaths are hypertrophied and hyperplastic; the perimysium is likewise becoming hyperplastic; finally the small vessels have undergone for the most part the commencement of granular degeneration.

The two patients of whom we report the cases died of asphyxia; now, the state of the lungs is not sufficient to explain this kind of death; only the second patient had any hepatiza-

tion of the lungs, and that very slightly. It is to be noticed that, in these two patients, the intestinal lesions were very slightly marked, since in the first, we only found two ulcerated patches; in the second, one only; on the contrary, the muscular system presented very remarkable alterations. All the muscles of respiration; the pectoralis, intercostals, diaphragms, rectus of the abdomen, were attached with granulo-vitreous degeneration to a very great extent.

Is it not evident that this degeneration of muscles has contributed, in our cases, to the bringing about of death by asphyxia?

The derangement of the fibres of the heart is no less important than that of the muscles of respiration. Before the researches of Zenker, a particular state of the heart had already been noticed by Laennec in bad cases of fever; by Louis in typhoid fever; by Stokes in petechial typhus.

Zenker considered as very rare the alteration of the fibres of the heart in typhoid fever. He only observed in one case a very advanced granular alteration of the fibres of the heart; the patient died suddenly. Alteration of the heart appeared more common to Mr. Hayem, who met it in several patients who died suddenly during typhoid fever, in whom no other lesion could explain the cause of death.

Four times, in forty cases of typhoid fever, I have found the heart inclining towards granular degeneration. We are very much disposed, when not in the habit of examining the fibres of the heart under the microscope, to declare fibres diseased which are not. For example, most often death happens before the alteration of the cardiac fibers has gone beyond the granular state; we do not find there any vitreous masses. Now, very often, in the normal state, the fibres of the heart are granular, the striates scarcely apparent; moreover, a very slight pressure exercised upon these fibres with the covered objective, causes these delicate striates to disappear completely. In order to characterize the alteration of the heart, it is necessary, first, that there should be a very extensive granular degeneration, bringing about a more or less complete discoloration of the organ; secondly, a multiplication of the cellular elements, so well described by Mr. Hayem, (*Archives de Physiologie Normale et Pathologique*, 1869).

To be concluded next month.

HEALING OF ULCERS BY TRANSPLANTATION.

BY PROF. FRANK H. HAMILTON, M. D.

In a report of my clinic at the Dispensary of Geneva Medical College for January, 1847, the case of a lad fifteen years old is given, whose leg had been in a great measure stripped of integument eight years before, and the wound had never closed. The report says: "Dr Hamilton proposed to the boy a plastic operation, with the view of planting upon the *centre* of the ulcer a piece of new and perfectly healthy skin. (This proposition was first made to him two years before.) He proposes to take this from the calf of the other leg, *not intending to cover over the whole sore, but perhaps, two or three square inches, which he believes will be enough to secure the closure of the whole wound in a short time.*"*

This lad did not consent to have me operate, and in 1864 he was still living, and the sore remained open.

My first operation of this kind was made January 21, 1854, upon Horace Driscoll, in the Buffalo Hospital of the Sisters of Charity. Driscoll had lost a large portion of the integument of his leg by the fall of a heavy stone upon it; and after the lapse of fifteen months it was apparent that the ordinary processes of nature were insufficient for its repair. A full account of this operation was published in the *New York Journal of Medicine* for the same year.† It may be found, also, copied in the *Buffalo Medical Journal* for December, 1854, vol. x., pp. 433, 438.

The integument was taken from the calf of the opposite leg, but was wholly inadequate to cover the entire sore. In ninety days cicatrization was complete, and it has remained so until the present day, or until a recent date, when I last heard from him. In the result it was observed that the new piece of skin had grown from its circumference in every direction, so that it was in the end nearly twice its original size.

In the paper referred to occur the following remarks: "By this means I hope, gentlemen, not only to supply an amount of skin equal to the size of the piece transferred, but to furnish also a nucleus from which additional skin shall be formed. I hope to establish a new centre of life—an oasis—from whose outer verge a true and healthy vegetation shall advance in every direction over the exhausted soil."

I further stated that the graft would not only grow, but that it would also expand centrifugally by the contraction of the surrounding granulations, as by the contraction of the granulations the skin about the ulcer is known to be drawn centripetally; and

* *Buffalo Medical and Surgical Journal*, February, 1847, vol. II., p. 508.

† Old Ulcers treated by Anaplasty. Read before the Buffalo Medical Association June 27, 1854, by Frank H. Hamilton, Professor of Surgery in the University of Buffalo, and Surgeon to the Buffalo Hospital of the Sisters of Charity.

in confirmation of this also I referred to the case above described. The following summary closed my remarks :

1. Ulcers, accompanied with extensive loss of integument, do generally refuse to heal, whatever may be the health of the body or of the limb.

2. Anaplasty will succeed sometimes in accomplishing a permanent cure, and especially when the health of the body and of the limb is perfect, and when, by inference, the refusal to heal is alone attributable to the extent of the tegumentary loss.

3. The graft must be brought from a part quite remote ; generally from the opposite limb, or from another person (because in no other way could the graft, with its pedicle attached, according to my method, be carried to the centre of the ulcer).

4. *If smaller than the chasm which it is intended to fill, the graft will grow, or project from itself new skin to supply the deficiency.*

5. It is not improbable that the graft will *expand*, during the process of cicatrization at its margins, but especially for a time after the cicatrization is consummated. (This proposition I have since fully verified.)

6. In consequence of one or of both of these two latter circumstances, *it will not be necessary to make the graft so large as the deficiency it is intended to supply.*

In reply to Dr. Watson, of New York, who had said that anaplasty for the cure of old ulcers was not new, and that he had done the same himself, I answered in the number of the *New York Journal of Medicine* for January, 1855, that he had only repeated a very old operation of sliding in integument, and one which I had often made myself, long before my new suggestion was announced. "He had never yet thought of making the flap smaller than the space which it is intended to supply, and then trusting to growth and expansion to complete the cure. . . He has not, therefore, adopted my procedure, nor obtained my results."

Since the date of my first operation, I have repeated the operation many times, and with almost uniform success. Last winter, at Bellevue Hospital, Dr. Gouley carried the operation a step farther than myself by applying it for the cure of an extensive burn of the *thigh*. Before operating, Dr. Gouley requested me to see the case with him, and to give an opinion as to whether my operation would succeed. I assured him that if he could engraft only a small piece upon the centre of the immense ulcer, success would be almost certain : but that, inasmuch as he must take the skin from the opposite thigh, I had some fears that he would lose the graft. It would be more difficult than in the case of the leg, to so cross the limbs that the pediculated graft could be attached to the centre of the sore. Dr. Gouley made the operation ; and, although only a very small piece was saved, the success of the operation has been nearly or quite complete.

In December, 1869. M. Reverdin, *interne* at La Charite, read before the Surgical Society of Paris, a paper on Epidermic Grafting, which was published in the bulletin of the Society for that year, and also in the *Gazette des Hopitaux* for January 11 and 22, 1870.

The method proposed and practiced by M. Reverdin consists in detaching, with the scissors or with the knife, a minute piece of skin, the smaller the better, it is affirmed, and then burying it in the center of the granulated ulcer; by which simple process a new centre of growth is established, and the sore is healed. The attention of American surgeons was first drawn to this interesting discovery by the experiments of Mr. Pollock, at St. George's Hospital, in May, 1870; and in the following August I commenced a series of observations in the same direction at the Charity Hospital, Blackwell's Island, where we have constantly under our care many hundreds of old ulcers. The results of my first experiments were given to the public by my house-surgeon, Dr. Williams.* Of fifty transplantations made either by myself or by Dr. Williams, only six were successful—the great disproportion of failures being due to the almost indiscriminate selection of cases, and to the great variety of methods which we adopted, our purpose being to determine the extent of its applicability, and to ascertain in what manner success would be most certainly attained. Since the date of these operations I have seldom met with a failure, except in those cases in which a failure has been predicted from the unfavorable aspect of the sore, or the instructions in relation to management have not been fully carried out. The following remarks comprise the results of the observations hitherto made, and in which nearly all observers concur:

The more healthy the condition of the granulations the better is the chance of success; indeed, with perfectly healthy granulations, success is almost certain. It is not material from what point of the body the graft is taken, although it will be found most convenient to take it from some portion which is thin and flexible. With a pair of fine, mouse-toothed forceps the integument is lifted, and with the knife or scissors cut out. It is generally considered essential that the areolar tissue and fat should not be included in the graft; whether this is a matter of consequence or not I am unable to say; but it is certain that it makes no difference how small the piece may be: it is not necessary to cut so deep as to draw blood. Having cut out a piece as small as can be conveniently removed, we may proceed to divide it into several smaller pieces, nor does the amount of contusion which it suffers in this process seem to affect its vitality. After a trial of several methods of inserting the fragments,

* Healing Ulcers by Transplantations. By H. R. Williams, M. D., late House Surgeon, Charity Hospital. *Medical Gazette*, December 8, 1870.

I have arrived at the conclusion that, if the granulations are fresh and vigorous, there is no better way than simply to lay them upon the surface without attempting to embed them by incisions, nor does it seem to be a matter of any consequence how they lie, whether with the raw surface turned in the one direction or the other. The grafts, when several are inserted simultaneously, should be placed at intervals of about one inch apart, as it is observed that the limit of growth of each separate piece does not in general exceed a diameter of one inch or thereabout. In order to retain them in place, I have generally used common adhesive plaster, re-inforced by a few turns of the roller. If the operation of grafting is made upon either of the extremities, it will be necessary to impose upon the patient absolute rest, in the recumbent posture; but more especially is this required in the case of the lower extremities.

The dressings should be permitted to remain undisturbed two or three days, when they may be removed, and the sore made clean with tepid water and soap, and subsequently bathed with a solution of carbolic acid and water, of the strength of three or four grains to the ounce. The subsequent treatment will be the same as for an ulcer under ordinary circumstances.

When the dressings are first removed, what appear to be the grafts may be seen lying where they were originally placed, or floating loosely about. Sometimes they seem to have disappeared altogether. It is thought that these points, which seem to be the grafts, are only the cuticle which has been sloughed off from the derma; but I am not able to say whether this is so or not. When they remain attached, the underlying process of development of new skin cannot be observed so accurately; but when they have floated away from their original position, we shall notice, first, a slight depression where they were deposited, which depression is in some cases substituted for a corresponding elevation a few days later—generally, I think, the point remains depressed; second, on about the seventh or tenth day after the grafting, the centre of the depression or elevation, assumes a bluish-white, opaque appearance, precisely like that which I heretofore described as appearing upon exposed bone when skin is beginning to form. By the aid of a glass the increased vascularity, and some degree of opacity, may be detected at an earlier period. This is the commencement of the process of skin-formation.

At the same moment, also, in which we discover that the transplantation has been successful, we shall see, in case a graft is placed within half or three-quarters of an inch of the margin of the ulcer, that skin is projecting from the margin toward the graft in the form of a minute promontory, so that, if I may be permitted to use a figure of speech, a bridge is soon formed in this direction between the island and the main-land; in a few

days more the graft is lost in the surrounding integument, and becomes in its turn the outer margin of the greatly-diminished sore. Finally, all the grafts coalesce, each contributing an inch or less to the completion of the cicatrization.

Mr. Steele, who has contributed an excellent paper to the elucidation of this subject, is inclined to think that consecutive transplantations are better than numerous simultaneous insertions, and that each series gives fresh life and vigor to the whole surface.*

How far the new skin differs from ordinary cicatricial tissue I am not prepared to say, but it appears thicker and more elastic, and it is certainly equally capable of resisting all ordinary destructive influences. Like cicatricial tissue, it is devoid of hair-follicles, sebaceous and sweat glands.

Later experiments have shown that success will occasionally attend the employment of much larger pieces than were employed by Reverdin. I have succeeded with grafts of the size of a five and ten cent piece; but portions are pretty certain to slough, and I doubt whether this method possesses any advantages which would justify its substitution for the much less painful and simpler method just described.

Mr. Fiddes, of England, claims to have succeeded equally by scattering upon the open ulcer the epidermis scraped from the surface of the skin with a dull knife. I have not made the experiment; but Mr. Woodman says he has tried, and has had no result.

Finally, to complete the narrative of experiments which have been instituted up to the present time, a graft has been taken from the leg immediately after its amputation, and its transplantation has proved successful; while Mr. Pollock has failed to generate skin with colored pigment, by transplantation from the negro.

Various theories have already been suggested in explanation of this wonderful process; the most plausible of which seems to be that the epithelial cell contained in the graft, imparts to the granulations with which it is placed in contact a new and peculiar vital force, by virtue of which they are enabled to construct cells of the same character; in other words, that we have in this experiment an illustration of the doctrine of assimilation. In my original paper on transplantation for healing old ulcers, I stated several objections to this doctrine; but on the whole it appears, in the light of later experiments, less liable to objections than any other yet suggested. Like all the vital processes, however, it is likely to remain for a long time, if not forever, in doubt.

The range of the applicability of M. Reverdin's operation is

* Clinical Lecture by Charles Steele, Esq., Surgeon to the British Royal Infirmary. *British Medical Journal*, December 16, 1870.

not limited to the cure of large ulcers. We have already been able to substitute it for the usual forms of anaplasty in the case of contractions from burns and from other causes, by first dividing the tissues freely, and then, when granulations are fully developed, inserting the grafts. In this way I have even succeeded in restoring to position an averted lid. It is equally capable of preventing contractions and deformities of limbs, by its timely interposition. At Bellevue we have covered by the same method exposed stumps, which would otherwise have demanded resection. No doubt, also, further experience will show many additional circumstances under which it will prove useful. —*New York Medical Journal.*

FUNGOID ORIGIN OF DISEASE, AND SPONTANEOUS GENERATION.

The Fungoid Origin of Disease, and Spontaneous Generation are two subjects of deep interest to medical and scientific men, and are quite closely allied. On the former subject J. Hogg, Hon. Sec. R. M. S., (*Monthly Microscopic Journal*,) Sept. 7, states: "In the report of the medical officer of the Privy Council just issued, the origin and pathology of contagion, is ably discussed, and the crude hypothesis of Hallier bearing upon this point, who sought to prove that the microzymes and sporules of fungi which he found in the fluids of persons affected with cholera caused the disease, is finally disposed of. Dr. Sanderson's experiments and investigations fully show that neither bacteria nor microzymes are concerned in the production of any specific form of disease in the living animal body, and therefore when found must be looked upon as an indication of a putrefactive process occurring after death. A drop of water, a glass slide, or even the fingers coming in contact with a fluid or tissue under examination is quite sufficient to cause the development of either bacterior or microzymes, in an incredibly short time. In this way a disturbing element is introduced which mars and mystifies the most carefully made investigation of the histologist."

The very fact that these spores are "always present in the atmosphere" would alone invalidate Hallier's conclusions. We are glad the latter made his observations and Sanderson so completely upset them, for it will but increase attention to this subject, and in time we may have the disease-germs described. That contagious diseases, that may be so readily transplanted, are caused by germs, seems so evident as to be quite universally admitted. Beale thinks they "consist of a peculiar kind of living germinal matter, the smallest particle of which, when supplied with its proper pabulum, will grow and multiply, giving

rise to millions of little particles like itself, each having similar properties and powers." These are so minute as to require a magnifying power of 1000 or 2000 diameters to see them. Dr. Otis thinks syphilitic virus consist essentially of disease-germs similar to those described by Beale. Dr. Sanderson, J. Hogg declares, could find no "positive evidence that bacteria or microzymes can be discovered in the blood of persons affected with scarlatina." If Beale has seen in the secretions of vaccine, variola, etc., what he so positively states, the solution of the vexed question of the origin of contagious diseases is near at hand.

On the spontaneous generation question Hogg states that "since we can not undertake to say with anything like certainty that we have succeeded in destroying every living germ in any experiment * we may institute, then, I fear, the spontaneous generation hypothesis is hardly worthy of further serious consideration." In conclusion he quotes Henry J. Carter, F. R. S., who says, "I do not believe in spontaneous generation, nor will the theory, if ever substantiated, be so until a knowledge of the ultimate forms of the phenomena called 'life' is obtained; while it seems to me that we are as far from this as from the ultimate atoms of matter. When we see, under the microscope, insect forms almost as small as the smallest animalcules, and know, from inference, how complicated their structure must be; when we find their limbs as transparent as glass, and thus, apparently, as structureless, yet know that there is structure even in glass; when we find that there is no extent to the slowness of change of form and movement in organized matter; that with the highest magnifying power we can limit; that even unmelted iron is said to flow; when on the other hand, the power of determining the velocity of bodies diminishes with the magnifying power, so that distance and magnitude itself are required to make us sensible of the rate at which comets travel, even if out of the presence of the atoms of matter *en masse* which form their nebularities, so that neither one nor the other could be seen if close to us, any more than electricity or uncondensed steam; when, I repeat, our perceptions in these respects remain so finite, how can any one come forward with the assertion that there is such a thing as "spontaneous generation" based upon the presence of animalcules, which, produced under any circumstances, may be, and probably are, far more complicated in structure, and therefore higher in the scale of organic development, than a host of living beings with whose forms even we have as yet no means of becoming cognizant.

"Progressive knowledge may lead the human mind to the beginning of vitality, to the quickening power of matter and its

* Living creatures have reappeared in a solution heated from 280 to 320 degrees, F.

processes; but until this is made, it seems to me premature to assume as a fact that there is such a power as spontaneous generation."

SUBMERSION MICROSCOPE.

R. E. Dudgeon, M. D., describes, under this name, in the *Quarterly Journal of Microscopical Science* for July, 1871, a contrivance by which the objective of an ordinary microscope can be plunged in water without affecting its optical qualities. A brass tube with its lower end closed water-tight by a flat disk of glass is slipped over the objective from below, so far that the glass disk is considerably within the working focus of the lens. Thus protected, the lens can be lowered into water, syrup, glycerin, etc. to a depth limited only by the mechanism of the microscope or the length of the protecting tube, and used to view objects floating in the liquid or lying on the bottom of the vessel containing it. While the common "tank microscope" can be worked best somewhat horizontally, through the side of the tank, this arrangement, besides being applicable to much higher powers, is adapted to give a more or less vertical view, being entirely free from any tremor on account of the motion of the top of the water, and is therefore especially useful for dissecting purposes. Its object, though not its method, is identical with that of Tolles's immersion objective for low powers, published more than two years ago; though the latter naturally possesses, being constructed especially for this use and dispensing with two unnecessary surfaces of glass, some optical superiority as well as a much longer working focus. The submersion tube, being applicable to ordinary lenses, only slightly lowering their magnifying power and considerably shortening their working focus, will doubtless be extensively useful; though the statement that it may be always retained in position as a protecting cover to the lens without impairing the definition or illumination in ordinary work, must be considered as too enthusiastic. It is especially applicable to lenses of from one inch to one-quarter inch focus (the latter limited to a very small angle), and the objects should be placed in a jar or tank having the bottom and at least one side quite smooth and transparent.—R. H. W., *Amer. Naturalist*.

ELECTROLYSIS.

Dr. A. D. Rockwell, New York (*N. Y. Medical Journal*), refers to the relations which the very interesting and suggestive phenomena recorded sustain to the practical application of electrolysis in the treatment of disease, which are not sufficiently understood to render the subject a complete or exact science.

Clinical experience teaches that living is more readily electrolyzed than dead tissue. This is accounted for from the fact that living tissue is capable of the process of absorption, and that its solutions are warmer, and therefore better conductors. When, therefore, a tumor capable of being electrolyzed is submitted to the action of the galvanic current, a threefold action is produced:—1. Its fluid constituents suffer decomposition. Hydrogen and alkalies, soda and potassa, go to the cathode, and oxygen and acids to the anode. While electrolytic action thus takes place at both poles, it is evident that this action is most vigorous, and more readily produces absorption in living tissue at the cathode. At the anode, however, decided chemical action takes place, and successful results are obtained by it. But since electrolytic action is modified by the composition of the electrolyte and the character of the poles, it is probable that a more extended clinical experience will establish more definitely the important fact that some conditions of disease are most successfully treated by the positive, and others by the negative pole. 2. Absorption is hastened by the chemical effects of the current and the mechanical and irritating effects of the needles, and may slowly continue for weeks. 3. Disintegration and atrophy take place. If the part acted on by the current be a small wen, wart, or naevus, the tissue may become changed in color, dried and shriveled, and almost entirely disappear during the operation.

In treating the various forms of tumors, aneurisms, and varicose veins, serous effusions, wounds, and ulcers, both poles may be made to operate simultaneously; or, if only the negative pole is used, the current is completed by placing the positive, connected with a sponge electrode, on a neighboring part.—*Medical Record.*

MEDICAL GLEANINGS.

From the Pacific Medical and Surgical Journal.

ORIGIN OF THE POISON OF SCARLATINA.—An English writer, Dr. Carpenter, attributes the production of the poison of scarlet fever to the decomposition of the blood of animals. He details cases of the outbreak of the disease near slaughter-houses, and in localities where manure from slaughter-houses had been used. Though he does not deny its contagiousness, yet he believes it capable of arising *de novo* from the assigned source. So far, so good. We have long regarded the doctrine as fallacious which attributes scarlatina, and a number of other maladies, exclusively to a specific, self-generated poison. All such diseases must have started up at some period in the history of man, and their specific virus must have originated in the human body, as it were, without inheritance. And though the condition of things has changed in the long ages, yet it appears plausible in

theory, and also consistent with fact, that specific poisons of the same nature continue to be developed or created by the original process. We believe it is universally conceded that erysipelas, while it springs up spontaneously, is capable of developing a specific virus which will reproduce the disease. What is there unreasonable in placing many other "zymotic" affections in the same category? How shall we account for the origin of chicken-pox, mumps, whooping-cough, and a variety of like affections, which often break forth in localities remote from their previous existence, unless the doctrine be admitted that the specific virus of many, if not of all, contagious disorders, may be generated in the human body under certain conditions hitherto inappreciable, without the presence of any pre-existing germinal poison *sui generis*? True, the hypothesis of *organic* germs is opposed to this view, unless we adopt the doctrine of the spontaneous generation of life. But that hypothesis, in regard to most diseases, is a mere conjecture. It is far more probable that the virus of specific diseases is mostly chemical, and developed in the fluids of the body in a similar manner to the poison which inoculates a dissecting wound.

THE TEA-SPOON AS A MEASURE.—A writer in the *Canadian Pharmaceutical Journal*, who has examined the subject critically, says that the tea-spoons have been gradually growing larger of late years, the spoon of the last century having been only about two-thirds of the size of that now in common use. He adds, however, that three sizes are made at the present time—large, medium, and small, containing 95, 85, and 60 minims respectively. Table-spoons, also, have increased, and vary from 4, 5 to 6 fluid drachms in capacity. He infers that the dose of certain articles may be unsafe, if a tea-spoonful or a table-spoonful be ordered, and proposes to abolish the dessert-spoon as a measure, substituting two tea-spoonfuls. It is rarely, we apprehend, that more than a drachm is administered as a teaspoonful, or more than half an ounce as a table-spoonful. On the contrary, nine times in ten, according to our experience, an ounce mixture, when ordered in tea-spoonful doses, will afford more than eight doses, and an eight-ounce mixture more than sixteen table-spoonfuls. Nurses seldom fill the spoon to its utmost capacity.

"BOILING OUT" THE STOMACH.—At a meeting of the Atlanta Academy of Medicine (*Atlanta Medical and Surgical Journal*), a member gave an account of his favorite method of emptying the stomach when other means had failed, by taking advantage of the effervescence of acid and alkali. A negro boy, *æt.* 14, was insensible from supposed poisoning by stramonium, and it was found impossible to induce emesis by any ordinary process. "An ash-hopper close by suggested the idea of acids and alkali."

lies to *boil out* the supposed poison. With no time to lose, gave a tea-cupful of lye and the little tartaric acid he had, drenched down, followed by another tea-cupful of lye and a little soda—all he could get—and rolled him over a few times, when he boiled out several quarts of half-masticated, raw, red yam-potatoes. The boy remained insensible twenty-four hours longer, deaf the same length of time, and blind for about eight hours, had some fever on reaction, but made good his recovery." A great boy that!

CURE FOR CONSUMPTION.—The following perscription was furnished to the *London Medical Press and Circular*, coming from a clergyman in the West of England, reputed of great skill in diseases of the chest: Isinglass, 1 oz.; eringo root, 1 oz.; garden snails, $\frac{1}{2}$ pint; hartshorn shavings, $\frac{1}{2}$ oz.; three dried vipers from Butler's Covent Garden; $1\frac{1}{2}$ pints water. Boil down to a pint. We suspect it was stolen by the clergyman from Li-potai, who was once ardently patronized by a distinguished clergyman of San Francisco.

EFFICACY OF REVACCINATION.—It is stated in the *Edinburgh Medical Journal* that at a recent meeting of the Glasgow Medico-Chirurgical Society, "not one member was able to adduce one single instance of a revaccinated person having taken small-pox. The sentiment maintained that when small-pox prevails, every individual above five years of age, in an infected locality, ought to be revaccinated. We believe this is the universal conviction of impartial medical observers in all parts of the world.

LOCAL ANESTHESIA.—Dr. Spessa states, in the *Bulletin des Sc. Med.* (Italy), that he has succeeded in preventing pain, during the sitting of a fistulous tract, by injecting a solution of morphia into the tract before the use of the knife. The same author had occasion to touch the vulvar vegetations of a girl with butter of antimony: the pain was very acute, but disappeared on the part being brushed over with a solution of morphia. A boy of fifteen, suffering from hip-joint disease, required an issue over and behind the great trochanter. An injection of morphia was first made over the region, and Vienna paste applied, which latter remained about eight minutes. The paste did not give any pain. Dr. Spessa states that he would be glad to hear that a fair trial has been given to this mode of using morphia.—*Lon. Lancet*.

DR. PANCOAST'S TREATMENT OF INVERTED TOE-NAIL.—Dr. Pancoast never removes the nail, nor any portion of it; but, as the trouble arises from the edge of the nail dipping down into the flesh at the side of the toe, he cuts away the soft parts, and leaves the nail in a position where it can do no harm; then raising up its free edge, and separating it thoroughly from the parts below it with a thin handle of a scalpel, he slips beneath

it a strip or two of adhesive plaster, and carries the ends beneath the ball of the toe and round upon the metatarsus, so as to force the soft parts down and the nail up. When the parts heal, the side of the nail will be free from any covering. One great advantage of this operation is that the patient is almost immediately enabled to attend to his business. He keeps the parts covered for several days with a strong aqueous solution of subacetate of lead and laudanum.—*Medical Archives.*

Editorial.

CLOSE OF VOLUME IV.—The present number of the MEDICAL REPERTORY close its fourth volume. We are happy to say that the year has been a prosperous one; and now at the end, there is so much evidence of increasing popularity on the part of the journal that we are full of bright anticipations as regards the future. We are under many obligations to numerous friends for kind words of encouragement and substantial assistance. We hope to continue to merit their approbation and aid.

We beg pardon for indulging in some egotism; but we cannot refrain from giving it as our opinion that we publish the best medical journal for the price in America. One of the most distinguished eastern physicians, with whom we have no personal acquaintance, never having met him, stated to a physician of the West that the MEDICAL REPERTORY was the only medical journal published West, that was worth reading. We do not believe ourself that all the western journals are worthless except the REPERTORY; but we do believe that none of them surpass it, but few equalling, in the excellence of its matter, and we know none compare with it in cheapness. All our contributors have been good writers, and of high standing in the profession. We have published during the year, scarcely a single poor article. The selected matter has been selected with care from the best American and Euro-

pean journals. Our readers will have noticed that in the translations from foreign journals by Dr. Minor, there has been an effort to treat them to something new, to something a little outside of those subjects that form the staple of discussion in medical journals.

An important feature that has marked the course of the REPERTORY has been its independence and fearlessness. It has hesitated at no time to attack abuses in high places; and it has attacked them successfully; overthrowing them. The most powerful professional ring that ever existed in this city, or probably in any other city, has been compelled to succumb to the attacks of our journal, and yield up the spoils which they had dishonorably come into possession of. For the first time since there has been more than one regular medical school in Cincinnati, they are all on an equality in the advantages of Hospital clinics, and it is well known that it was brought about by the REPERTORY. Of course enemies have been made, and friends estranged, but the course of the journal has been kept straight forward without variation in one jot or one tittle, and we have had the satisfaction in seeing it triumph in all that it has undertaken. In the pursuit of what is right, we believe in trampling down everything that stands in the way.

We intend that the REPERTORY shall pursue the same independent

fearless course in time to come, that it has in times past. While it will present to its subscribers from month to month the highest class of medical literature, and will endeavor to supply information of the best and most recent means of treating disease, it will continue its efforts to improve the ethics of the profession, by exposing and attacking such abuses as seems to need reformation. A medical journal that furnishes merely scientific intelligence, performs only half its duty. A proper morale is no less important than knowledge. Without it bad men flourish, while the worthy are robbed of their reward. Corruption rankled in the profession of England until the *Lancet*, by its exposures and personal attacks, compelled a respect for right. We design the REPERTORY shall pattern after it; and if we do not make it felt among the wicked, it will be because such are incapable of being affected by the contempt of right thinking men. A vigorous warfare will be waged on all wrong doers who do not mend their ways.

We desire to say to subscribers who are in arrears that we design erasing their names from our books, and therefore they had better pay up at once. As we keep on hand but few back numbers, delinquents should see to it that their accounts are settled right away, or they may not be able to secure the first numbers of the coming year.

TRUSTEES OF MEDICAL COLLEGES.—In this country but very few of the medical colleges receive any support from the state, or have any endowment fund. As a result, their only pecuniary resources are the fees obtained from students, and, in case these prove insufficient to meet expenditures, the pockets of the professors. In fact, our medical colleges, as a general thing, are private institutions; the property of the gentlemen composing the faculty. The boards of trustees are but nominal bodies for the purpose of fulfilling a re-

quirement of the law that an official sanction may be given such proceedings as the conferring of degrees.

Beyond giving an official sanction to certain proceedings, it is not intended, in the very nature of things, that trustees of a private institution should exercise any further authority—at that point, morally, at least, it becomes exhausted. Any further exercise of it would be a breach of faith with the faculty, and an outrage. No number of gentlemen would hardly combine together for the purpose of establishing a school, expend their money in erecting or fitting up a building, purchasing apparatus, and supplying all necessary conveniences, if they did not feel that the trustees that *they themselves had created* were morally bound "to keep hands off," and let them manage affairs after their own way. Who would be willing to take part in an organization, or enter it after it had been completed, if he had the slightest reason to suppose that an irresponsible body of outsiders would, sooner or later, after he had expended a vast deal of time, labor and anxiety, and more or less money in advancing its interests, come in and take possession—probably driving him out? We do not think many sane men would. Every man, whether he is or is not, regards himself as the most competent to manage his own property, and never takes it kindly that the privilege is taken away from him. He may be a very great fool in so thinking and feeling; but that he does is a fact beyond a peradventure—it is a *property* in him as it is in a bee to sting when touched.

In all these private institutions of the country, an understanding is had between the trustees and the faculty, that the former are at no time to exercise any control, or in any way to intermeddle with the management of affairs; and, on the other hand, the latter assume all financial responsibility, and responsibility of every kind. In fact, the latter, constitute not only themselves, but make the board of trus-

tees. Even when vacancies occur in the board of trustees from resignation or death, it is the custom of the faculty to nominate those whom they desire to fill the places; and no board composed of gentlemen understanding the relations they sustain to the school, and possessed of that delicacy which all gentlemen are supposed to have, would even for a moment think of filling up their own number with any one without the consent of those in whose interests they are understood to be laboring. Trustees act as such only in the way of accommodation to certain gentlemen, their friends. They have no responsibilities, financial or otherwise, and of course exercise no authority. At the close of a session they confer the degree of M. D. on those members of the graduating class recommended to them for the purpose by the faculty, attend the commencement exercises, and, adjourning to a refreshment room, eat oysters and drink wine at the expense of the faculty; and there their duties end.

But suppose the faculty of a private institution differ among themselves in the management of their affairs, have not the trustees then morally a right to interfere, and exercise the authority which the law confers upon them, even to the expelling some of the members? If an outside party, bearing the relation of a friend, has the right to enter the house of a family in which some feuds exist, drive out the members and take possession himself, then we suppose nominal trustees might seize on the private property of a number of gentlemen, and appropriate it as it suited them, on the plea that such harmony did not prevail as should. We think in either case the act would be regarded as an outrage of the most offensive character. In the case instanced trustees have no right other than to use their influence to bring about a proper state of feeling, and, failing in that, to resign. Under no circumstances have they any moral authority to play the robber, or unduly intermeddle in any way.

In a state or endowed institution (medical), of which there are but very few in this country, an entirely different state of affairs exists from what prevails in a private institution. In the former the trustees receive their appointment from a governor, legislature, city council, or stockholders, and in turn appoint the faculty. They are not created by the faculty, *but they create the faculty*. As they hold the property and pay the faculty out of a fund that is not contingent on tuition fees, they have and should have authority restricted only by common principles of fair dealing. They have the right to appoint and discharge for proper cause, and are amenable only to the power creating them. But whoever heard of the creature governing the creator? of controlling that which made it, and to which it is responsible? for if the trustees of a private institution are not responsible to the faculty they are not responsible to anything, which would be an inexplicable condition of affairs.

We do not suppose that in many instances the trustees of a private medical college attempt any usurpation, but we can very well imagine that such *might* be the case. All men are not capable of making the nice distinction between right and wrong which should be made, and are, therefore, apt to mistake might for right. In other words, they are apt to consider they have a right to do whatever they have it in their power to do. Such a code of morals, of course, is the same as that which governs the lower animals in their actions, but yet it prevails to a not inconsiderable extent among men.

The safest course for a faculty to pursue to guard against usurpation by the trustees is to *make themselves the trustees*. They will then not only be masters of the situation morally, but legally, and will not be exposed to the danger of an unprincipled faction among themselves, in a cowardly manner, calling in the aid of trustees to carry out high handed proceedings, and, by forcing men into the faculty

against the will of the majority. make the original majority a minority.

If all men were honest, and all had sense enough to distinguish between right and wrong, there would be no trouble; but unfortunately all men are not honest, and all honest men cannot discern between good and evil. It is lamentable how limited is the range of human intelligence as regards moral duties and other matters. We often see much cunning displayed, but not much sense. It often seems to be about the same with man as it is with the lower animals. Among the latter, as a certain writer says, the fox is cunning, but had it the sense to learn to climb a tree like the cat, men would soon give up hunting it. But the fox, like so many men, cannot get out of the usual groove of thought, cannot originate anything; and, like not a few scheming plotters, it wastes a great deal of low cunning in efforts which a little larger view of things would render quite unnecessary.

We propose to continue this subject if thought necessary.

HOSPITAL CLINICS.—There are supposed to be about five hundred medical students in attendance upon lectures this winter in Cincinnati. About four hundred of these attend the clinics of the Cincinnati Hospital. The other hundred, which are exclusively students of the Medical College of Ohio, attend the clinics of the Good Samaritan. Sister Anthony, who is a very honest lady, fearing that the faculty of the Ohio College, which forms her staff, were not able to give their own students the full five dollars' worth of clinical instruction, which she charges for tickets, has called into their aid three of the faculty of the Cincinnati College of Medicine and Surgery. She has very properly determined that the students of the Ohio College, if they do not get the worth of the amount they pay at the College for didactic teaching, they shall at least get the worth of the money they pay her

for clinical instruction. The superior advantages which the Cincinnati Hospital affords for clinical instruction cause the students of all the Colleges, except those of the Ohio College, to give it the preference over any of the other Hospitals.

DR. CHARLES A. LYND, a graduate of the Cincinnati College of Medicine and Surgery, died in this city, Nov. 17th, in the twenty-ninth year of his age. Dr. Lynd was a gentleman of more than ordinary refinement and culture, and was highly esteemed. Although cut down at a very early age, yet in the few years of professional life that was allotted him, he showed himself to be possessed of more than ordinary ability, and would, undoubtedly, have attained to an enviable position. His numerous friends will mourn his loss for a long time, for those who came to know him were much attached to him.

He died at the residence of Mr. James McFarlan, on Ninth Street, where kind and sympathizing friends ministered to him. His disease was pneumonia. He was sick about three weeks.

DR. CHARLES F. J. LORD, Hampstead, Eng and, says, it would be easy to fill columns of a medical journal with illustrations of the abominable abuse of the so-called *medical charities* in Great Britain. Some years ago he attended a grand dinner at one of the medical anniversaries, and among the toasts given was, "The Medical Charities of the city and their officers." A physician attached to one of these charities returned thanks, and said, *inter alia*, "I am proud to belong to a profession which does much for nothing." It is presumable he meant for no money return. This boast somewhat annoyed Dr. Lord, as in a morning speech in favor of the Poor-law medical staff he had argued that "the laborer was worthy of his hire—worthy of a fair day's pay for a fair day's good work done." He lived to see this man dependent

